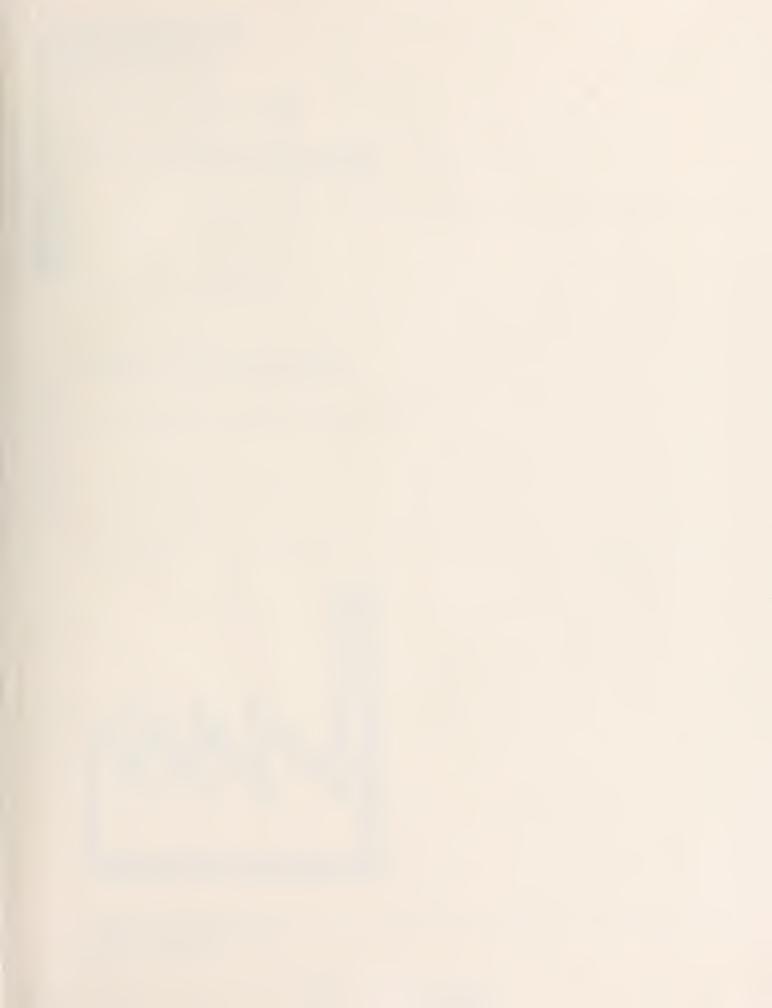
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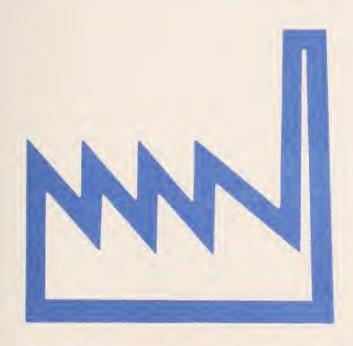
# 148/ Census of Manufactures

MC87-I-22B

**INDUSTRY SERIES** 

### **Knitting Mills**

Industries 2251, 2252, 2253, 2254, 2257, 2258, and 2259



#### **ACKNOWLEDGMENTS**

Many persons participated in the various activities of the 1987 Census of Manufactures.

The overall planning and review of the census operations were performed by the staff of the Office of the Assistant Director for Economic and Agriculture Censuses.

This report was prepared in the Industry Division. Join Govoni, Assistant Chief for Census/ASM Programs, was responsible for the overall planning, management, and coordination of the census of manufactures. Planning and implementation were under the direction of Michael Zampogna, Chief, Census/ASM Nondurables Branch, with primary data analysis responsibilities performed by Ted McGrath.

Systems and procedures for mailout, receipt, correspondence, data input, industry classification, other clerical processing, administrative record processing, and quality control, along with the associated electronic computer programs, were developed in the Economic Surveys Division, W. Joel Richardson, Chief.

Mailout preparation and receipt operations, clerical and analytical review activities, data keying, and geocoding review were performed by the staff of the Data Preparation Division, **Joseph S. Harris,** Chief.

Geographic coding procedures and associated computer programs were developed by the staff of the Geography Division, Robert W. Marx, Chief.

The computer processing systems were developed and coordinated in the Economic Programming Division, Barry M. Cohen, Chief. Hyman Chansky, Assistant Division Chief for Industry Programs, was responsible for implementation of the computer systems. The computer programs were prepared under the supervision of George D. Anderson, Chief, Minerals and Manufactures Branch, assisted by Barbara Lambert, Gerald Turnage, and Gary Sheridan.

Computer processing was performed in the Computer Services Division, Marvin D. Raines, Chief.

The planning, design, review, and composition of report forms were performed in the Administrative Services Division, **Michael G. Garland**, Chief.

The staff of Publications Services Division, Walter C. Odom, Chief, performed publication planning, design, composition, editorial review, and printing planning and procurement. Cynthia G. Brooks provided publication coordination and editing.

Special acknowledgment is also due the many businesses whose cooperation has contributed to the publication of these data.

If you have any questions concerning the statistics in this report, call (301) 763-2510.

# 1987

# Census of Manufactures

MC87-I-22B

**INDUSTRY SERIES** 

### **Knitting Mills**

Industries 2251, 2252, 2253, 2254, 2257, 2258, and 2259

Issued March 1990



U.S. Department of Commerce Robert A. Mosbacher, Secretary Thomas J. Murrin, Deputy Secretary Michael R. Darby, Under Secretary for Economic Affairs

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#### Library of Congress Cataloging-in-Publication Data

Census of manufactures (1987). Industry series. 1987 census of manufactures. Industry series.

"MC87-I- ."

LC holdings recorded in Shelflist only.

I. United States. Bureau of the Census. II. Title.

HD9724.C4 1988a 338'.02'0973 88-600160

For sale by Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402.

#### INTRODUCTION

#### PURPOSE AND USES OF THE ECONOMIC CENSUSES

The economic censuses are the major source of facts about the structure and functioning of the Nation's economy. They provide essential information for government, business, industry, and the general public.

Economic censuses furnish an important part of the framework for such composite measures as the gross national product, input-output measures, production and price indexes, and other statistical series that measure short-term changes in economic conditions.

Policy-making agencies of the Federal Government use the data, especially in monitoring economic activity and providing assistance to business.

State and local governments use the data to assess business activities and tax bases within their jurisdictions and to develop programs to attract business.

Trade associations study trends in their own and competing industries, and keep their members informed of market changes.

Individual businesses use the data to locate potential markets and to analyze their own production and sales performance relative to industry or area averages.

#### **AUTHORITY AND SCOPE**

Title 13 of the United States Code (sections 131, 191, and 224) directs the Census Bureau to take the economic censuses every 5 years, covering years ending in 2 and 7. The 1987 Economic Censuses consist of the

Census of Retail Trade Census of Wholesale Trade Census of Service Industries Census of Transportation Census of Manufactures Census of Mineral Industries Census of Construction Industries

Special programs also cover enterprise statistics and minority-owned and women-owned businesses. (The 1987 Census of Agriculture and 1987 Census of Governments are conducted separately.) The next economic censuses are scheduled to be taken in 1993 covering the year 1992.

#### **AVAILABILITY OF THE DATA**

The results of each of the economic censuses are available in printed reports, for sale by the U.S. Government Printing Office, and on microfiche, computer tape, compact discs with read-only memory, and flexible diskettes, for sale by the Census Bureau. Order forms for all types of products are available on request from Customer Services, Census Bureau, Washington, DC 20233. A more complete description of publications being issued from this census is on the inside back cover of this document.

Census facts are also widely disseminated by trade associations, business journals, and newspapers. Volumes containing census statistics are available in most major public and college libraries. Finally, State Data Centers in every State and Business and Industry Data Centers in many States also supply economic census statistics.

#### WHAT'S NEW IN 1987

Several changes have taken place for the 1987 censuses. Data will be reported on the basis of the newly revised Standard Industrial Classification (SIC) system with selected reports including "bridge tables," linking the old and new classification systems. A new set of metropolitan areas has been adopted, and more detailed information will be available for businesses with no paid employees. For additional information on these changes, review the subsequent text.

#### HISTORICAL INFORMATION

The economic censuses have been taken together as an integrated program at 5-year intervals since 1967, and before that for 1963, 1958, and 1954. Prior to that time, the individual censuses were taken separately at varying inter-

The economic censuses trace their beginnings to the 1810 Decennial Census, when questions on manufacturing were included with those for population. Coverage of economic activities was expanded for 1840 and subsequent censuses to include mining and some commercial

activities. In 1902, Congress established a permanent Census Bureau and directed that a census of manufactures be taken every 5 years. The 1905 manufactures census was the first time a census was taken apart from the regular every-10-year population census.

The first census of business was taken in 1930, covering 1929. Initially it covered retail and wholesale trade, and construction industries, but it was broadened in 1933 to include some of the service trades.

The 1954 economic censuses were the first to be fully integrated—providing comparable census data across economic sectors, using consistent time periods, concepts, definitions, classifications, and reporting units. These were the first censuses to be taken by mail, using lists of firms provided by the administrative records of other federal agencies. Since 1963, administrative records have also been used to provide basic statistics as well for very small firms, reducing or eliminating the need to send them census questionnaires. The Enterprise Statistics Program, which publishes combined data from the economic censuses, was made possible with the implementation of the integrated census program in 1954.

The range of industries covered in the economic censuses has continued to expand. The Census of Construction Industries began on a regular basis in 1967, and the scope of service industries was broadened in 1967, 1977, and 1987. The Census of Transportation began in 1963 as a set of surveys covering travel, transportation of commodities, and trucks. New for 1987 are publications reporting on business establishments engaged in several transportation industries, paralleling the data on establishments in other sectors. This is part of a gradual expansion in coverage of industries previously subjected to government regulation. The Survey of Minority-Owned Business Enterprises was first conducted as a special project in 1969 and was incorporated into the economic censuses in 1972 along with the Survey of Women-Owned Businesses.

Economic censuses have also been taken in Puerto Rico since 1909, in the Virgin Islands and Guam since 1958, and in the Northern Mariana Islands since 1982.

Statistical reports from the 1982 and earlier censuses provide historical figures for the study of long-term time series, and are available in some large libraries. All of the census data published since 1967 are still available for sale on microfiche from the Census Bureau.

### AVAILABILITY OF MORE FREQUENT ECONOMIC DATA

While the censuses provide complete enumerations every 5 years, there are many needs for more frequent data as well. The Census Bureau conducts a number of monthly, quarterly, and annual surveys, the results of which appear in publication series such as *Current Business Reports* (retail and wholesale trade and service industries), the *Annual Survey of Manufactures, Current Industrial Reports*, and the *Quarterly Financial Report*. Most of these surveys, while providing more frequent

observations, yield less kind-of-business and geographic detail than the censuses. The *County Business Patterns* program offers annual statistics on the number of establishments, employment, and payroll classified by industry within each county.

#### SOURCES FOR MORE INFORMATION

More information about the scope, coverage, classification system, data items, and publications for each of the economic censuses and related surveys is published in the *Guide to the 1987 Economic Censuses and Related Statistics.* More information on the methodology, procedures, and history of the censuses will be published in the *History of the 1987 Economic Censuses.* Contact Customer Services for information on availability.

#### **CENSUS OF MANUFACTURES**

#### General

This report, from the 1987 Census of Manufactures, is one of a series of 83 industry reports, each of which provides statistics for individual industries or groups of related industries. Additional separate reports will be issued for each State and the District of Columbia and for special subjects such as type of organization, distribution of sales by class of customer, concentration ratios and water use in manufacturing.

The industry reports include such statistics as number of establishments, employment, payroll, value added by manufacture, cost of materials consumed, capital expenditures, product shipments, etc.

State reports present similar statistics for each State and its important metropolitan statistical areas (MSA's), counties, and places. Selected statistical totals for "all manufacturing" have been shown in the State reports for MSA's with 250 employees or more and for counties and places with 450 employees or more.

The *General Summary* report will contain industry, product class, and geographic area statistics summarized in one report. The introduction to the *General Summary* discusses, at greater length, many of the subjects described in this introduction. For example, the *General Summary* text will discuss the relationship of value added by manufacture to National income by industry of origin, the changes in statistical concepts over the history of the censuses, and the valuation problems arising from intracompany transfers between manufacturing plants of a company and between manufacturing plants and sales offices and sales branches of a company.

#### Scope of Census and Definition of Manufacturing

The 1987 Census of Manufactures covers all establishments with one paid employee or more primarily engaged in manufacturing as defined in the 1987 Standard Industrial

Classification (SIC) Manual<sup>1</sup>. This is the system of industrial classification developed by experts on classification in Government and private industry under the guidance of the Office of Information and Regulatory Affairs, Office of Management and Budget. This classification system is used by Government agencies as well as many organizations outside the Government.

The SIC Manual defines manufacturing as the mechanical or chemical transformation of substances or materials into new products. The assembly of component parts of products also is considered to be manufacturing if the resulting product is neither a structure nor other fixed improvement. These activities are usually carried on in plants, factories, or mills that characteristically use powerdriven machines and materials-handling equipment.

Manufacturing production is usually carried on for the wholesale market, for transfers to other plants of the same company, or to the order of industrial users rather than for direct sale to the household consumer. Some manufacturers in a few industries sell chiefly at retail to household consumers through the mail, through house-to-house routes, or through salespersons. Some activities of a service nature (enameling, engraving, etc.) are included in manufacturing when they are performed primarily for trade. They are considered nonmanufacturing when they are performed primarily to the order of the household consumer.

#### Relationship Between Annual Survey of Manufactures and Census of Manufactures

The Bureau of the Census conducts the annual survey of manufactures (ASM) in each of the 4 years between the censuses of manufactures. The ASM is a probability-based sample of approximately 56,000 establishments and collects the same industry statistics (employment, payroll, value of shipments, etc.) as the census of manufactures. In addition to collecting the information normally requested on the census form, the establishments in the ASM sample are requested to supply information on assets, capital expenditures, retirements, depreciation, rental payments, supplemental labor costs, costs of purchased services. and foreign content of materials consumed. Except for supplemental labor costs, the extra ASM items are collected only in census years.

#### **Establishment Basis of Reporting**

The census of manufactures is conducted on an establishment basis. A company operating at more than one location is required to file a separate report for each location. The ASM also is conducted on an establishment basis, but separate reports are filed for just those establishments selected in the sample. Companies engaged in

distinctly different lines of activity at one location are requested to submit separate reports if the plant records permit such a separation and if the activities are substantial in size.

In 1987, as in earlier years, a minimum size limit was set for inclusion of establishments in the census. All establishments employing one person or more at any time during the census year are included. The same size limitation has applied since 1947 in censuses and annual surveys of manufactures. In the 1939 and earlier censuses, establishments with less than \$5,000 value of products were excluded. The change in the minimum size limit in 1947 does not appreciably affect the historical comparability of the census figures except for data on number of establishments for a few industries. This report excludes information for separately operated administrative offices, warehouses, garages, and other auxiliary units that service manufacturing establishments of the same company (see Auxiliaries).

#### Manufacturing Universe and Census Report **Forms**

The 1987 Census of Manufactures universe includes approximately 350,000 establishments. The amounts of information requested from manufacturing establishments were dependent upon a number of factors. The more important considerations were the size of the company and whether it was included in the annual survey of manufactures. The methods of obtaining information for the various subsets of the universe to arrive at the aggregate figures shown in the publication are described below:

#### 1. Small Single-Establishment Companies Not Sent a Report Form

In the 1987 Census of Manufactures, approximately 150,000 small single-establishment companies were excused from filing reports. Selection of these small establishments was done on an industry-by-industry basis and was based on annual payroll and total shipments data as well as on the industry classification codes contained in the administrative records of Federal agencies. The cutoffs were selected so that these administrative-records cases would account for no more than 3 percent of the value of shipments for all manufacturing. Generally, all single-establishment companies with less than five employees were excused, while all establishments with more than 20 employees were mailed forms.

Information on the physical location of the establishment, as well as information on payrolls, receipts (shipments), and industry classification, was obtained from the administrative records of other Federal agencies under special arrangements, which safeguarded their confidentiality. Estimates of data for these small establishments were developed using industry averages in conjunction with the administrative information. The value of shipments and cost of materials

<sup>&</sup>lt;sup>1</sup>Standard Industrial Classification Manual: 1987: For sale by Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402, Stock No. 041-001-00314-2.

were not distributed among specific products and materials for these establishments but were included in the product and material "not specified by kind" (n.s.k.) categories.

The industry classification codes included in the administrative-records files were assigned on the basis of brief descriptions of the general activity of the establishment. As a result, an indeterminate number of establishments were erroneously coded at the four-digit SIC level. This was especially true whenever there was a relatively fine line of demarcation between industries or between manufacturing and nonmanufacturing activity.

Sometimes these administrative-record cases were only given a two- or three-digit SIC group. For the 1987 Census of Manufactures, these establishments were sent a separate classification form, which requested information on the products and services of the establishment. This form was used to code many of these establishments to the four-digit SIC level. Establishments that did not return the classification form were coded later to those four-digit SIC industries identified as "not elsewhere classified" (n.e.c.) within the given two- or three-digit industry groups.

As a result of these situations, a number of small establishments may have been misclassified by industry. However, such possible misclassification has no significant effect on the statistics other than on the number of companies and establishments.

The total establishment count for individual industries should be viewed as an approximation rather than a precise measurement. The counts for establishments with 20 employees or more are far more reliable than the count of total number of establishments.

#### 2. Establishments Sent a Report Form

The 200,000 establishments covered in the mail canvass were divided into three groups:

a. ASM sample establishments—This group consisted of approximately 56,000 establishments covering all the units of large manufacturing establishments as well as a sample of the medium and smaller establishments. The probability of selection was proportionate to size (see appendix, Annual Survey of Manufactures).

In a census of manufactures year, the ASM report form (MA-1000) replaces the first page of the regular census form for those establishments included in the ASM. In addition to information on employment, payroll, and other items normally requested on the regular census form, establishments in the ASM sample were requested to supply information on assets, capital expenditures, retirements, depreciation, rental payments, supplemental labor costs, and costs of purchased services. See appendix A, section 2, for an explanation of these items.

The census part of the report form is one of approximately 200 versions containing product, material, and special inquiries. The diversity of manufacturing activities necessitated the use of these many forms to canvass the 459 manufacturing industries. Each form was developed for a group of related industries.

Appearing on each form was a list of products primary to the group of related industries as well as secondary products and miscellaneous services that establishments classified in these industries were likely to be performing. Respondents were requested to identify the products, the value of each product, and, in a large number of cases, the quantity of the product shipped during the survey year. Space also was provided for the respondent to describe products not specifically identified on the form.

The report form also contained a materials-consumed inquiry, which varied from form to form depending on the industries being canvassed. The respondents were asked to review a list of materials generally used in their production processes. From this list, each establishment was requested to identify those materials consumed during the survey year, the cost of each, and, in certain cases, the quantity consumed. Once again, space was provided for the respondent to describe significant material not identified on the form.

Finally, a wide variety of special inquiries was included to measure activities peculiar to a given industry, such as operations performed and equipment used.

- b. Large and medium establishments (non-ASM)—Approximately 84,000 establishments were included in this group. A variable cutoff, based on administrative-records payroll data and determined on an industry-by-industry basis, was used to select those establishments that were to receive one of the approximately 200 census of manufactures regular forms. The first page, requesting establishment data for items such as employment and payroll, was standard but did not contain the detailed statistics included on the ASM form. The product, material, and special inquiry sections supplied were based on the historical industry classification of the establishment.
- c. Small single-establishment companies (non-ASM)—This group consisted of approximately 60,000 establishments. For those industries where application of the variable cutoff for administrative-records cases resulted in a large number of small establishments being included in the mail canvass, an abbreviated or "short" form was used. These establishments received one of the approximately 80 versions of the short form, which requested

summary product and material data and totals but no details on employment, payrolls, cost of materials, inventories, and capital expenditures.

Use of the short form has no adverse effect on published totals for the industry statistics; the same data were collected on the short form as on the long form. However, detailed information on materials consumed was not collected on the short form; thus its use would increase the value of the n.s.k. categories.

#### **Auxiliaries**

In this industry report, the data on employment and payroll are limited to operating manufacturing establishments. The census report form filed for auxiliaries (ES-9200) requested a description of the activity of the establishments serviced. However, the manufacturing auxiliaries were coded only to the two-digit major group of the establishments they served; whereas, the operating establishments were coded to a four-digit manufacturing industry. Data for the approximately 10,000 separately operated auxiliaries are included in the geographic area series and in a report issued as part of the 1987 Enterprise Statistics Survey.

Auxiliaries are establishments whose employees are primarily engaged in performing supporting services for other establishments of the same company, rather than for the general public or for other business firms. They can be at different locations from the establishments served or at the same location as one of those establishments but not operating as an integral part thereof and serving two establishments or more. Where auxiliary operations are conducted at the same location as the manufacturing operation and operate as an integral part thereof, they usually are included in the report for the operating manufacturing establishment.

Included in the broad category of auxiliaries are administrative offices. Employees in administrative offices are concerned with the general management of multiestablishment companies, i.e., with the general supervision and control of two units or more, such as manufacturing plants, mines, sales branches, or stores. The functions of these employees may include (1) program planning, including sales research and coordination of purchasing, production, and distribution; (2) company purchasing, including general contracts and purchasing methods; (3) company financial policy and accounting; (4) general engineering, including design of product machinery and equipment, and direction of engineering effort conducted at the individual operation locations; (5) direction of company personnel matters; and (6) legal and patent matters.

Other types of auxiliaries serving the plants or central management of the company include purchasing offices, sales promotion offices, research and development organizations, etc.

#### **Industry Classification of Establishments**

Each of the establishments covered in the census was classified in 1 of 459 manufacturing industries in accordance with the industry definitions in the 1987 SIC Manual. The 1987 edition of this manual represents a major revision for manufacturing industries from the 1972 edition and its 1977 supplement. Appendix A of the 1987 Manual notes the revisions in the four-digit industry levels between 1972/77 and 1987.

An industry is generally defined as a group of establishments producing the same product or a closely related group of products. The product groupings from which industry classifications are derived are based on considerations such as similarity of manufacturing processes, types of materials used, types of customers, and the like. The resulting group of establishments must be significant in terms of number, value added by manufacture, value of shipments, and number of employees. The system operates in such a way that the definitions progressively become narrower with successive additions of numerical digits. For 1987, there are 20 major groups (two-digit SIC). 139 industry groups (three-digit SIC), and 459 industries (four-digit SIC). This represents an expansion of four-digit industries from 452 in 1972/77 and a reduction of threedigit groups from 143 in 1972/77. Product classes and products of the manufacturing industries have been assigned codes based on the industry from which they originate. There are about 11,000 products identified by a seven-digit code. The seven-digit products are considered the primary products of the industry with the same four digits.

Accordingly, an establishment is usually classified in a particular industry on the basis of its major activity during a particular year, i.e., production of the products primary to that industry exceeds, in value, production of the products primary to any other single industry. In a few instances, however, the industry classification of an establishment is not only determined by the products it makes but also by the process employed in operations. Refining of nonferrous metals from ore or rolling and drawing of nonferrous metals (processes which involve heavy capitalization in specialized equipment) would be classified according to the process used during a census year. These establishments then would be "frozen" in that industry during the following ASM years.

In either a census or ASM year, establishments included in the ASM sample with certainty weight, other than those involved with heavily capitalized activities described above, are reclassified by industry only if the change in the primary activity from the prior year is significant or the change has occurred for 2 successive years. This procedure prevents reclassification when there are minor shifts in product mix.

In ASM years, establishments included in the ASM sample with noncertainty weight are not shifted from one industry classification to another. They are retained in the industry where they were classified in the base census year (see appendix, Annual Survey of Manufactures).

However, in the following census year, these ASM plants are allowed to shift from one industry to another.

The result of these rules covering the switching of plants from one industry classification to another is that, at the aggregate level, some industries comprise different mixes of establishments between survey years, and establishment data for such industry statistics as employment and payroll may be tabulated in different industries between survey years. Hence, comparisons between prior-year and current-year published totals, particularly at the four-digit SIC level, should be viewed with caution. This is particularly true for the comparison between the data shown for a census year versus the data shown for the previous ASM

As previously noted, the small establishments that may have been misclassified by industry are usually administrativerecord cases whose industry codes were assigned on the basis of incomplete descriptions of the general activity of the establishment. Such possible misclassifications have no significant effect on the statistics other than on the number of companies and establishments.

While some establishments produce only the primary products of the industry in which they are classified, all establishments of an industry rarely specialize to this extent. The industry statistics (employment, inventories, value added by manufacture, total value of shipments including resales and miscellaneous receipts, etc.) shown in tables 1a through 5a, therefore, reflect not only the primary activities of the establishments in that industry but also their secondary activities. The product statistics in table 6a represent the output of all establishments whether or not they are classified in the same industry as the product. For this reason, in relating the industry statistics, especially the value of shipments to the product statistics, the composition of the industry's output shown in table 5b should be considered.

The extent to which industry and product statistics may be matched with each other is measured by two ratios which are computed from the figures shown in table 5b. The first of these ratios, called the primary product specialization ratio, measures the proportion of product shipments (both primary and secondary) of the establishments classified in the industry represented by the primary products of those establishments. The second ratio, called the coverage ratio, is the proportion of primary products shipped by the establishments classified in the industry to total shipments of such products by all manufacturing establishments.

However, establishments making products falling into the same industry category may use a variety of processes and materials to produce them. Also, the same industry classification (based on end products) may include both establishments that are highly integrated and those that put only the finishing touches on an already highly fabricated item. For example, the refrigeration equipment industry includes instances of almost complete integration (production of the compressor, condensing unit, electric motor, casting, stamping of the case, and final assembly) all carried on at one plant. On the other hand, the condensing unit, the motor, and the case may be purchased and only assembled into the finished product.

In some instances, separate industry categories have been established for integrated and nonintegrated establishments. For other industries, the census provides separate statistics on the production of intermediate commodities made and used in the producing plant. For some industries characterized by many plants of the same company, separate figures on interplant transfers of products usually are shown.

Differences in the integration of production processes, types of operations, and alternatives in types of materials used should be considered when relating the industry statistics (employment, payrolls, value added, etc.) to the product and material data.

#### Value of Shipments for the Industry Compared With Value of Product Shipments

This report shows value of shipments data for industries and products. In tables 1a through 5a, these data represent the total value of shipments of all establishments classified in a particular industry. The data include the shipments of the products classified in the industry (primary to the industry), products classified in other industries (secondary to the industry), and miscellaneous receipts (repair work, sale of scrap, research and development, installation receipts, and resales). Value of product shipments shown in table 6a represents the total value of all products shipped that are classified as primary to an industry.

#### **CENSUS DISCLOSURE RULES**

In accordance with Federal law governing census reports, no data are published that would disclose the data for an individual establishment or company. However, the number of establishments classified in a specific industry is not considered a disclosure, so this information may be released even though other information is withheld.

The disclosure analysis for the industry statistics in tables 1a through 5a of this report is based on the total value of shipments. When the total value of shipments cannot be shown without disclosing information for individual companies, the complete line is suppressed. However, the suppressed data are included in higher-level totals. Additional disclosure analysis is performed for new capital expenditures that can be suppressed even though value of shipments data are publishable.

#### SPECIAL TABULATIONS

Special tabulations of data collected in the 1987 Census of Manufactures may be obtained on computer tape or in tabular form. The data will be in summary form and subject to the same rules prohibiting disclosure of confidential information (including name, address, kind of business, or other data for individual business establishments or companies) as are the regular publications.

Special tabulations are prepared on a cost basis. A request for a cost estimate, as well as exact specifications on the type and format of the data to be provided, should be directed to the Chief, Industry Division, Bureau of the Census, Washington, DC 20233.

#### ABBREVIATIONS AND SYMBOLS

The following abbreviations and symbols are used in this publication:

-	Represents zero.
(D)	Withheld to avoid disclosing data for individual
	companies; data are included in higher level
	totals.
(NA)	Not available.
(NC)	Not comparable.
(S)	Withheld because estimate did not meet pub-
	lication standards.
(X)	Not applicable.
(Z)	Less than half the unit shown.
do	Ditto.

n.e.c.	Not elsewhere classified.
n.s.k.	Not specified by kind.
pt.	Part.
r	Revised.
SIC	Standard Industrial Classification.

Other abbreviations, such as lb, gal, vd, doz, bbl, and s tons, are used in the customary sense.

#### CONTACTS FOR DATA USERS

Subject Area	Contact	Phone
Census/ASM Durables Nondurables	Kenneth Hansen Michael Zampogna	(301) 763-7304 (301) 763-2510
Current Indus- trial Reports Durables Nondurables	Malcolm Bernhardt Thomas Flood	(301) 763-2518 (301) 763-5911
Import/Export Publications	Foreign Trade Division	(301) 763-5140
Industry Analysis and Forecasts	International Trade Administration	(202) 377-4356

# Users' Guide for Locating Statistics in This Report by Table Number

For explanation of terms, see appendixes

			Four-digi	t industry s	statistics				e-digit prod en-digit pro		
ltem	Histori- cal	Operat- ing ratios	By geo- graphic area	Sum- mary and supple- mental	By employ- ment size	By industry and product class specialization		Industry- product analysis	Product ship- ments	Product class by geo- graphic area	Historical product class
Number of companies	1a			3a					*6a		
Number of establishments	1a		2	За	4	5a					
Employment and payroll:  Number of employees  Payroll  Supplemental labor costs  Production workers  Production- worker hours  Production- worker wages	1a 1a 1a 1a 1a	1b 1b 1b 1b 1b	2 2 2 2 2	3a 3a 3a 3a 3a 3a	4 4 4 4	5a 5a 5a 5a 5a			,		
Shipments, cost of materials, and value added: Value of shipments (four-digit)	1a	1b	2	3а	4	5a		5b	6a	6b	<b>6</b> c
(seven-digit)	1a 1a	1b 1b	2 2	3a 3a 3a	4	5a 5a	7		6a		
Inventories: Total, end of year	1a			3a 3a	4						
Capital expenditures, assets, rental payments, and purchased services:  New capital expenditures.  Used plant and equipment expenditures.  Gross assets  Depreciation.  Retirements of buildings and machinery.  Rental payments  Foreign content of materials consumed.  Purchased services.	1a		2	3b 3b 3b 3b 3b 3c 3c	4	5 <b>a</b>					
Ratios: Specialization Coverage	1a 1a			3a 3a				5b 5b			

<sup>\*</sup>Number of companies with shipments of more than \$100 thousand.

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## DESCRIPTION OF INDUSTRIES AND SUMMARY OF FINDINGS

This report shows 1987 Census of Manufactures statistics for establishments classified in each of the following industries:

#### SIC code and title

2251	Women's Hosiery, Except Socks
2252	Hosiery, N.E.C.
2253	Knit Outerwear Mills
2254	Knit Underwear Mills
2257	Weft (Circular) Knit Fabric Mills
2258	Lace and Warp Knit Fabric Mills
2259	Knitting Mills, N.E.C.

The industry statistics (employment, payroll, cost of materials, value of shipments, inventories, etc.) are reported for each establishment as a whole. Aggregates of such data for an industry reflect not only the primary activities of the establishments but also their activities in the manufacture of secondary products as well as their miscellaneous activities (contract work on materials owned by others, repair work, etc.). This fact should be taken into account when comparing industry statistics (tables 1 through 5a) with product statistics (table 6) showing shipments by all industries of the primary products of the specified industry. The extent of the "product mix" is indicated in table 5b, which shows the value of primary and secondary products shipped by establishments classified in the specified industry and the value of primary products of the industry shipped as secondary products by establishments classified in other industries.

Small single-establishment companies with up to 20 employees (cutoff varied by industry) were excluded from the mail portion of the census. For these establishments (and a small number of larger establishments whose reports were not received at the time the data were tabulated), data on payrolls and receipts were obtained from administrative records of other Federal agencies. The remaining statistics were developed from industry averages.

Establishment data were tabulated based on industry definitions included in the 1987 Standard Industrial Classification (SIC) Manual<sup>1</sup>. The 1987 edition represents a major revision for manufacturing industries from the 1972 edition and its 1977 supplement. In addition to the 1987 SIC revision, changes were made to the product class

(five-digit) and product code (seven-digit) categories. The product class and product code comparability between the 1987 and 1982 censuses is shown in the appendixes. These appendixes present, in tabular form, the linkage from 1987 to 1982.

All dollar figures included in this report are at prices current for the year specified and, therefore, unadjusted for changes in price levels. Consequently, when making comparisons to prior years, users should take into consideration the inflation that has occurred.

### INDUSTRY 2251, WOMEN'S HOSIERY, EXCEPT SOCKS

This industry is made up of establishments primarily engaged in knitting, dyeing, or finishing women's and misses' full-length and knee-length hosiery (except socks) both seamless and full-fashion, and panty hose. Establishments primarily engaged in knitting, dyeing, or finishing women's and misses' knee-length socks and anklets are classified in industry 2252. Establishments primarily engaged in manufacturing elastic (orthopedic) hosiery are classified in industry 3842.

The 1987 definition of this industry is the same as that used in the 1972/7 Standard Industrial Classification (SIC) system. The SIC number and title also are the same.

In the 1987 Census of Manufactures, Industry 2251, Women's Hosiery, Except Socks, had employment of 29.3 thousand. The employment figure was 3 percent below the 30.2 thousand reported in 1982. Compared with 1986, employment decreased 5 percent. The 1986 data are based on the Bureau's annual survey of manufactures (ASM), which is a sample survey conducted each year between censuses. The leading State in employment in 1987 was North Carolina accounting for 62 percent of the industry's employment. This same State was the leader in 1982, when it accounted for 68 percent of the industry's employment.

The total value of shipments for establishments classified in this industry was \$1.5 billion.

Establishments in virtually all industries ship secondary products as well as products primary to the industry to which they are classified and have some miscellaneous receipts, such as resales and contract receipts. Industry 2251 shipped \$1.4 billion of women's hosiery, except socks, products considered primary to the industry, \$29.4 million of secondary products, and had \$12.6 million of miscellaneous receipts, resales, and contract work. Thus, the ratio of primary products to the total of both secondary

<sup>&</sup>lt;sup>1</sup>Standard Industrial Classification Manual: 1987. For sale by Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402. Stock No. 041-001-00314-2.

and primary products shipped by establishments in the industry was 98 percent (specialization ratio). In 1982, the specialization ratio was 95 percent.

Establishments in this industry also accounted for 96 percent of products considered primary to the industry no matter where they actually were produced (coverage ratio). In 1982, the coverage ratio was 91 percent. The products primary to industry 2251, no matter in what industry they were produced, appear in table 6a and aggregate to \$1.5 billion. For further explanation of specialization and coverage ratios, see table 5b and the appendixes.

The total cost of materials, services, and fuels and electric energy used by establishments classified in the women's hosiery, except socks, industry amounted to \$715.6 million. Data on specific materials consumed appear in table 7.

Single-establishment companies in this industry with up to 20 employees were excluded from the mail portion of the census. The data for these establishments (and a small number of larger establishments whose reports were not received at the time the data were tabulated) were obtained from administrative records of other agencies or developed from industry averages. These establishments accounted for 4 percent of total value of shipments.

#### INDUSTRY 2252, HOSIERY, N.E.C.

This industry is made up of establishments primarily engaged in knitting, dyeing, or finishing hosiery, not elsewhere classified. Establishments primarily engaged in manufacturing women's full-length and knee-length hosiery (except socks), and panty hose are classified in industry 2251. Establishments primarily engaged in manufacturing elastic (orthopedic) hosiery are classified in industry 3842.

The 1987 definition of this industry is the same as that used in the 1972/7 Standard Industrial Classification (SIC) system. The SIC number and title also are the same.

In the 1987 Census of Manufactures, Industry 2252, Hosiery, N.E.C, had employment of 36.5 thousand. The employment figure was 12 percent above the 32.6 thousand reported in 1982. Compared with 1986, employment increased 11 percent. The 1986 data are based on the Bureau's annual survey of manufactures (ASM), which is a sample survey conducted each year between censuses. The leading State in employment in 1987 was North Carolina, accounting for 66 percent of the industry's employment. This same State was the leader in 1982, when it accounted for 62 percent of the industry's employment.

The total value of shipments for establishments classified in this industry was \$2.0 billion.

Establishments in virtually all industries ship secondary products as well as products primary to the industry to which they are classified and have some miscellaneous receipts, such as resales and contract receipts. Industry 2252 shipped \$1.9 billion of hosiery, n.e.c., products considered primary to the industry, \$45.5 million of secondary products, and had \$47.3 million of miscellaneous

receipts, resales, and contract work. Thus, the ratio of primary products to the total of both secondary and primary products shipped by establishments in the industry was 98 percent (specialization ratio). In 1982, the specialization ratio was 92 percent.

Establishments in this industry also accounted for 98 percent of products considered primary to the industry no matter where they actually were produced (coverage ratio). In 1982, the coverage ratio was 95 percent. The products primary to industry 2252, no matter in what industry they were produced, appear in table 6a and aggregate to \$1.9 billion. For further explanation of specialization and coverage ratios, see table 5b and the appendixes.

The total cost of materials, services, and fuels and electric energy used by establishments classified in the hosiery, n.e.c., industry amounted to \$1.0 billion. Data on specific materials consumed appear in table 7.

Single-establishment companies in this industry with up to 20 employees were excluded from the mail portion of the census. The data for these establishments (and a small number of larger establishments whose reports were not received at the time the data were tabulated) were obtained from administrative records of other agencies or developed from industry averages. These establishments accounted for 8 percent of total value of shipments.

#### **INDUSTRY 2253, KNIT OUTERWEAR MILLS**

This industry is made up of establishments primarily engaged in knitting outerwear from yarn or in manufacturing outerwear from knit fabrics produced in the same establishment. Establishments primarily engaged in hand knitting outerwear for the trade are included in this industry. Establishments primarily engaged in knitting gloves and mittens are classified in industry 2259, and those manufacturing outerwear from purchased knit fabrics are classified in major group 23. Products of this industry also are published in the Current Industrial Report MA-23A, Apparel.

The 1987 definition of this industry is the same as that used in the 1972/7 Standard Industrial Classification (SIC) system. The SIC number and title also are the same.

In the 1987 Census of Manufactures, Industry 2253, Knit Outerwear Mills, had employment of 59.0 thousand. The employment figure was 12 percent below the 66.8 thousand reported in 1982. Compared with 1986, employment decreased 2 percent. The 1986 data are based on the Bureau's annual survey of manufactures (ASM), which is a sample survey conducted each year between censuses. The leading States in employment in 1987 were New York, North Carolina, Virginia, and Pennsylvania, accounting for approximately 65 percent of the industry's employment. These same States were the leaders in 1982, when they accounted for approximately 60 percent of the industry's employment.

The total value of shipments for establishments classified in this industry was \$3.3 billion.

Establishments in virtually all industries ship secondary products as well as products primary to the industry to which they are classified and have some miscellaneous receipts, such as resales and contract receipts. Industry 2253 shipped \$2.9 billion of knit outerwear mills products considered primary to the industry, \$184.0 million of secondary products, and had \$130.6 million of miscellaneous receipts, resales, and contract work. Thus, the ratio of primary products to the total of both secondary and primary products shipped by establishments in the industry was 94 percent (specialization ratio). In 1982, the specialization ratio was 95 percent.

Establishments in this industry also accounted for 90 percent of products considered primary to the industry no matter where they actually were produced (coverage ratio). In 1982, the coverage ratio was 94 percent. The products primary to industry 2253, no matter in what industry they were produced, appear in table 6a and aggregate to \$3.3 billion. For further explanation of specialization and coverage ratios, see table 5b and the appendixes.

The total cost of materials, services, and fuels and electric energy used by establishments classified in the knit outerwear mills industry amounted to \$1.6 billion. Data on specific materials consumed appear in table 7.

Single-establishment companies in this industry with up to 20 employees were excluded from the mail portion of the census. The data for these establishments (and a small number of larger establishments whose reports were not received at the time the data were tabulated) were obtained from administrative records of other agencies or developed from industry averages. These establishments accounted for 13 percent of total value of shipments.

#### **INDUSTRY 2254, KNIT UNDERWEAR MILLS**

This industry is made up of establishments primarily engaged in knitting underwear and nightwear from yarn or in manufacturing underwear and nightwear from knit fabrics produced in the same establishment. Establishments primarily engaged in manufacturing underwear and nightwear from purchased knit fabrics are classified in major group 23. Establishments primarily engaged in knitting robes are classified in industry 2253. Products of this industry also are published in the Current Industrial Report MA-23A, Apparel.

The 1987 definition of this industry is the same as that used in the 1972/7 Standard Industrial Classification (SIC) system. The SIC number and title also are the same.

In the 1987 Census of Manufactures, Industry 2254, Knit Underwear Mills, had employment of 19.3 thousand. The employment figure was 13 percent below the 22.3 thousand reported in 1982. Compared with 1986, employment also decreased 13 percent. The 1986 data are based on the Bureau's annual survey of manufactures (ASM), which is a sample survey conducted each year between censuses. The leading States in employment in 1987 were

North Carolina, Kentucky, Tennessee, and Louisiana. This represents a shift from 1982 when North Carolina, Kentucky, Pennsylvania, and Tennessee were the leading States.

The total value of shipments for establishments classified in this industry was \$1.1 billion.

Establishments in virtually all industries ship secondary products as well as products primary to the industry to which they are classified and have some miscellaneous receipts, such as resales and contract receipts. Industry 2254 shipped \$741.9 million of knit underwear mills products considered primary to the industry, \$295.3 million of secondary products, and had \$20.9 million of miscellaneous receipts, resales, and contract work. Thus, the ratio of primary products to the total of both secondary and primary products shipped by establishments in the industry was 72 percent (specialization ratio). In 1982, the specialization ratio was 88 percent.

Establishments in this industry also accounted for 92 percent of products considered primary to the industry no matter where they actually were produced (coverage ratio). In 1982, the coverage ratio was 93 percent. The products primary to industry 2254, no matter in what industry they were produced, appear in table 6a and aggregate to \$803.2 million. For further explanation of specialization and coverage ratios, see table 5b and the appendixes.

The total cost of materials, services, and fuels and electric energy used by establishments classified in the knit underwear mills industry amounted to \$548.3 million. Data on specific materials consumed appear in table 7.

Single-establishment companies in this industry with up to 10 employees were excluded from the mail portion of the census. The data for these establishments (and a small number of larger establishments whose reports were not received at the time the data were tabulated) were obtained from administrative records of other agencies or developed from industry averages. These establishments accounted for 1 percent of total value of shipments.

### INDUSTRY 2257, WEFT (CIRCULAR) KNIT FABRIC MILLS

This industry is made up of establishments primarily engaged in knitting weft (circular) knit fabrics or in dyeing, or finishing weft (circular) knit fabrics.

The 1987 definition of this industry is the same as that used in the 1972/7 Standard Industrial Classification (SIC) system. The SIC number and title also are the same.

In the 1987 Census of Manufactures, Industry 2257, Weft (Circular) Knit Fabric Mills, had employment of 34.9 thousand. The employment figure was 12 percent above the 31.1 thousand reported in 1982. The leading State in employment in 1987 was North Carolina, accounting for 44 percent of the industry's employment. This same State was the leader in 1982, when it also accounted for 44 percent of the industry's employment.

The total value of shipments for establishments classified in this industry was \$3.6 billion.

Establishments in virtually all industries ship secondary products as well as products primary to the industry to which they are classified and have some miscellaneous receipts, such as resales and contract receipts. Industry 2257 shipped \$3.4 billion of weft (circular) knit fabric mills products considered primary to the industry, \$207.3 million of secondary products, and had \$15.2 million of miscellaneous receipts, resales, and contract work. Thus, the ratio of primary products to the total of both secondary and primary products shipped by establishments in the industry was 94 percent (specialization ratio). In 1982, the specialization ratio was 92 percent.

Establishments in this industry also accounted for 95 percent of products considered primary to the industry no matter where they actually were produced (coverage ratio). In 1982, the coverage ratio was 93 percent. The products primary to industry 2257 no matter in what industry they were produced, appear in table 6a and aggregate to \$3.5 billion. For further explanation of specialization and coverage ratios, see table 5b and the appendixes.

The total cost of materials, services, and fuels and electric energy used by establishments classified in the weft (circular) knit fabric mills industry amounted to \$2.2 billion. Data on specific materials consumed appear in table 7.

Single-establishment companies in this industry with up to 20 employees were excluded from the mail portion of the census. The data for these establishments (and a small number of larger establishments whose reports were not received at the time the data were tabulated) were obtained from administrative records of other agencies or developed from industry averages. These establishments accounted for 8 percent of total value of shipments.

### INDUSTRY 2258, LACE AND WARP KNIT FABRICS MILLS

This industry is made up of establishments primarily engaged in knitting, dyeing, or finishing warp (flat) knit fabrics, or in manufacturing, dyeing, or finishing lace goods.

Industry 2258, Lace and Warp Knit Fabric Mills, is a combination of 1972 SIC-based industries 2258, Warp Knit Fabric Mills, and 2292, Lace Goods.

In the 1987 Census of Manufactures, Industry 2258, Lace and Warp Knit Fabric Mills, had employment of 20.5 thousand. The leading States in employment in 1987 were North Carolina, New York, Pennsylvania, and New Jersey.

The total value of shipments for establishments classified in this industry was \$2.0 billion.

Establishments in virtually all industries ship secondary products as well as products primary to the industry to which they are classified and have some miscellaneous receipts, such as resales and contract receipts. Industry 2258 shipped \$1.9 billion of lace and warp knit fabric mills products considered primary to the industry, \$53.9 million of secondary products, and had \$4.3 million of miscellaneous receipts, resales, and contract work. Thus, the ratio of primary products to the total of both secondary and primary products shipped by establishments in the industry was 97 percent (specialization ratio).

Establishments in this industry also accounted for 92 percent of products considered primary to the industry no matter where they actually were produced (coverage ratio). The products primary to industry 2258 no matter in what industry they were produced, appear in table 6a and aggregate to \$2.1 billion. For further explanation of specialization and coverage ratios, see table 5b and the appendixes.

The total cost of materials, services, and fuels and electric energy used by establishments classified in the lace and warp knit fabric mills industry amounted to \$1.2 billion. Data on specific materials consumed appear in table 7.

Single-establishment companies in this industry with up to 20 employees were excluded from the mail portion of the census. The data for these establishments (and a small number of larger establishments whose reports were not received at the time the data were tabulated) were obtained from administrative records of other agencies or developed from industry averages. These establishments accounted for 9 percent of total value of shipments.

#### **INDUSTRY 2259, KNITTING MILLS, N.E.C.**

This industry is made up of establishments primarily engaged in knitting gloves and other articles, not elsewhere classified. Establishments primarily engaged in manufacturing woven or knit fabric gloves and mittens from purchased fabrics are classified in industry 2381. Products of this industry also are collected in the Current Industrial Report MA-23D, Gloves and Mittens.

The 1987 definition of this industry is the same as that used in the 1972/7 Standard Industrial Classification (SIC) system. The SIC number and title also are the same.

In the 1987 Census of Manufactures, Industry 2259, Knitting Mills, N.E.C., had employment of 3.8 thousand. The employment figure was 31 percent above the 2.9 thousand reported in 1982. The leading States in employment in 1987 were North Carolina, New York, and Wisconsin, accounting for approximately 70 percent of the industry's employment. This represents a shift from 1982 when New Jersey, New York, and North Carolina, accounted for approximately 75 percent of the industry's employment.

The total value of shipments for establishments classified in this industry was \$187.6 million.

Establishments in virtually all industries ship secondary products as well as products primary to the industry to which they are classified and have some miscellaneous receipts, such as resales and contract receipts. Industry 2259 shipped \$174.8 million of knitting mills, n.e.c., products considered primary to the industry, \$2.8 million of secondary products, and had \$10.0 million of miscellaneous receipts, resales, and contract work. Thus, the ratio of primary products to the total of both secondary and primary products shipped by establishments in the industry was 98 percent (specialization ratio). In 1982, the specialization ratio was 97 percent.

Establishments in this industry also accounted for 79 percent of products considered primary to the industry no matter where they actually were produced (coverage ratio).

In 1982, the coverage ratio was 81 percent. The products primary to industry 2259 no matter in what industry they were produced, appear in table 6a and aggregate to \$222.4 million. For further explanation of specialization and coverage ratios, see table 5b and the appendixes.

The total cost of materials, services, and fuels and electric energy used by establishments classified in the knitting mills, n.e.c., industry amounted to \$93.1 million. Data on specific materials consumed appear in table 7.

Single-establishment companies in this industry with up to 20 employees were excluded from the mail portion of the census. The data for these establishments (and a small number of larger establishments whose reports were not received at the time the data were tabulated) were obtained from administrative records of other agencies or developed from industry averages. These establishments accounted for 12 percent of total value of shipments.

#### Table 1a-1. Historical Statistics for the Industry (1987 Basis): 1987 and Earlier Years

[Industries with only 1987 data are revised for 1987. Table 1a-2 contains historical data on the old SIC basis. See table 1c-1 for composition of the new industry on the old SIC basis. Excludes

(Industries with on data for auxiliarie	ly 1987 dat s. For mea	a are revis	ed for 198 previations	and symbols	, see introdu	nistorical di actory text.	For explan	ation of term	s, see appendix	es]	on of the new	industry on	the old SIC	basis. E	xcludes
		All establi	shments <sup>3</sup>	All emp	loyees	Pro	duction wor	kers				New	End-of-	Rat	ios
Year <sup>1</sup>	Com- panies <sup>2</sup> (no.)	Total (no.)	With 20 employ- ees or more (no.)	Number (1,000)	Payroll (million dollars)	Number (1,000)	Hours (millions)	Wages (million dollars)	Value added by manufac- ture <sup>4</sup> (million dollars)	Cost of materials <sup>5</sup> (million dollars)	Value of shipments (million dollars)	capital expend- itures <sup>6</sup> (million dollars)	year inven- tories <sup>4</sup> (million dollars)	Spe- ciali- zation <sup>7</sup> (per- cent)	Cover- age <sup>8</sup> (per- cent)
					IN	NDUSTRY	2251, W	DMEN'S H	OSIERY, EXC	EPT SOCKS	9				
1987 Census 1988 ASM 1985 ASM 1984 ASM 1983 ASM	139 (NA) (NA) (NA) (NA)	181 (NA) (NA) (NA) (NA)	2233 8233 8833 8833 8833 8833 8833 8833	29.3 30.7 30.8 31.2 30.8	385.9 403.6 383.2 372.1 354.5	25.9 27.3 27.4 27.5 27.5	53.7 56.5 55.5 52.8 53.2	321.1 309.8 290.9 287.8 278.8	769.5 953.3 914.0 989.2 903.0	715.6 740.1 655.2 886.7 677.3	1 497.5 1 682.3 1 568.2 1 654.4 1 566.9	32.3 28.5 36.2 27.4 26.2	182.1 207.6 184.6 185.0 181.5	98 (NA) (NA) (NA) (NA)	96 (NA) (NA) (NA) (NA)
1982 Census 1981 ASM 1980 ASM 1979 ASM	180 (NA) (NA) (NA) (NA)	208 (NA) (NA) (NA) (NA)	117 (NAA) (NAA) (NAA)	30.2 29.8 30.1 31.2 28.0	311.1 289.5 277.8 266.5 224.2	26.7 25.4 28.3 27.4 24.7	49.6 49.4 50.1 52.2 45.0	241.5 224.3 221.1 213.1 178.7	777.4 708.9 654.6 638.7 520.9	838.8 605.7 570.1 534.2 476.9	1 411.3 1 304.5 1 218.6 1 162.2 995.7	26.0 22.6 27.8 26.6 1023.3	159.9 187.3 175.0 168.8 133.4	95 (NA) (NA) (NA) (NA)	91 (NA) (NA) (NA) (NA)
1977 Census 1978 ASM 1975 ASM 1974 ASM 1973 ASM 1972 Census	176 (NA) (NA) (NA) (NA) 256	200 (NA) (NA) (NA) (NA) 312	119 (NA) (NA) (NA) (NA) 217	26.6 28.4 30.5 34.7 48.0 49.5	191.3 179.3 185.9 194.4 234.8 247.4	23.8 23.6 26.8 30.3 40.4 43.5	44.1 43.1 47.2 52.7 70.3 80.0	158.6 145.2 148.1 152.9 188.3 199.0	457.0 362.4 334.0 326.2 381.0 438.8	415.5 356.4 402.9 435.6 501.2 533.3	871.2 713.5 762.5 781.7 886.1 984.7	16.6 13.1 15.9 13.7 17.8 15.9	122.9 113.1 119.8 139.3 172.7 175.8	91 (NA) (NA) (NA) (NA) 94	95 (NA) (NA) (NA) (NA)
							INDUSTR	Y 2252, H	OSIERY, N.E.	C.9					
1987 Census 1986 ASM 1985 ASM 1984 ASM 1983 ASM	375 (NA) (NA) (NA) (NA)	428 (NA) (NA) (NA) (NA)	278 (NA) (NA) (NA) (NA)	38.5 32.9 31.7 33.3 33.8	487.8 414.7 388.4 378.5 374.5	32.5 28.9 27.9 28.8 30.4	59.8 52.9 51.0 53.7 58.0	372.0 322.4 297.4 293.0 298.0	980.1 738.7 898.1 707.7 771.6	1 008.9 890.4 854.5 900.1 876.8	1 952.1 1 818.9 1 551.0 1 604.3 1 618.5	84.6 29.4 31.0 35.4 26.5	273.3 224.0 213.1 208.0 251.4	98 (NA) (NA) (NA) (NA)	98 (NA) (NA) (NA) (NA)
1982 Census 1981 ASM 1980 ASM 1979 ASM 1978 ASM	376 (NA) (NA) (NA) (NA)	420 (NA) (NA) (NA) (NA)	263 (NA) (NA) (NA) (NA)	32.6 30.9 32.3 31.3 32.9	326.5 303.6 290.4 260.8 245.8	28.8 27.0 28.1 27.5 29.7	51.2 51.7 53.4 52.7 55.6	258.1 235.1 226.8 207.9 201.9	617.3 537.4 495.1 436.4 470.1	832.2 771.2 708.9 625.4 581.1	1 443.4 1 294.4 1 192.9 1 061.3 1 031.2	31.4 32.7 22.1 15.5 15.2	199.2 168.6 161.6 147.6 150.2	92 (NA) (NA) (NA) (NA)	95 (NA) (NA) (NA) (NA)
1977 Census 1976 ASM 1975 ASM 1974 ASM 1973 ASM 1972 Census	382 (NA) (NA) (NA) (NA) 375	415 (NA) (NA) (NA) (NA) 415	257 (NA) (NA) (NA) (NA) 269	32.2 30.2 29.4 30.0 33.4 32.6	218.7 193.4 169.7 165.9 170.8 159.7	29.0 26.8 26.3 26.9 30.0 29.3	52.6 47.6 44.0 47.0 53.0 53.8	179.4 155.5 136.5 128.7 138.2 128.5	401.5 357.8 350.7 281.6 305.2 295.2	525.1 445.4 360.2 352.6 342.2 309.7	921.3 798.3 720.6 631.5 640.9 600.6	14.8 14.5 9.9 12.1 18.0 12.5	127.3 114.4 100.5 106.1 105.9 91.5	96 (NA) (NA) (NA) (NA) 95	96 (NA) (NA) (NA) (NA) 94
	INDUSTRY 2253, KNIT OUTERWEAR MILLS														
1987 Census 1986 ASM 1985 ASM 1984 ASM 1983 ASM	811 (NA) (NA) (NA) (NA)	824 (NA) (NA) (NA) (NA)	440 (NA) (NA) (NA) (NA)	59.0 60.4 62.7 67.8 74.5	838.4 824.9 830.2 835.0 862.3	50.6 51.4 52.9 57.2 63.4	96.9 95.2 97.2 109.2 114.5	619.1 601.6 603.8 609.6 636.2	1 677.8 1 695.3 1 675.4 1 906.4 1 842.6	1 614.4 1 741.5 1 894.5 1 754.5 1 609.7	3 255.2 3 447.2 3 604.3 3 607.1 3 410.0	94.0 85.6 86.5 116.6 63.8	545.8 571.1 626.3 672.5 600.6	94 (NA) (NA) (NA) (NA)	90 (NA) (NA) (NA) (NA)
1982 Census 1981 ASM 1980 ASM 1979 ASM 1978 ASM	896 (NA) (NA) (NA) (NA)	923 (NA) (NA) (NA) (NA)	482 (NA) (NA) (NA) (NA)	66.8 64.7 67.1 61.9 72.1	741.4 682.3 637.4 548.1 608.5	55.9 55.3 57.9 53.4 62.8	102.0 100.9 104.0 95.6 112.5	539.8 509.4 479.6 405.2 454.1	1 704.8 1 440.7 1 339.1 1 096.0 1 202.8	1 476.8 1 376.4 1 263.3 1 125.1 1 153.5	3 182.4 2 807.8 2 571.7 2 220.8 2 333.3	53.5 50.0 48.5 35.5 44.2	533.4 396.2 371.8 345.4 423.8	95 (NA) (NA) (NA) (NA)	94 (NA) (NA) (NA) (NA)
1977 Census 1976 ASM 1975 ASM 1974 ASM 1973 ASM 1972 Census	903 (NA) (NA) (NA) (NA) 882	953 (NA) (NA) (NA) (NA) 917	551 (NA) (NA) (NA) (NA) 547	73.0 69.3 65.4 76.1 80.2 74.4	582.0 525.7 483.3 513.7 491.7 430.4	62.7 59.4 55.6 65.7 70.0 65.1	114.0 108.9 103.2 120.8 132.2 122.5	422.0 380.3 349.5 373.1 371.1 324.1	1 159.5 994.4 953.4 996.7 937.5 799.5	1 207.1 1 144.8 1 012.8 1 069.4 989.0 919.0	2 335.9 2 140.7 1 995.7 2 047.3 1 914.3 1 703.8	49.9 35.2 46.7 41.9 54.0 45.9	393.4 328.2 315.8 351.2 316.1 273.2	90 (NA) (NA) (NA) (NA) 92	95 (NA) (NA) (NA) (NA) 96
						INDL	JSTRY 22	54, KNIT L	INDERWEAR	MILLS					
1987 Census 1986 ASM 1985 ASM 1984 ASM 1983 ASM	58 (NA) (NA) (NA) (NA)	63 (NA) (NA) (NA) (NA)	44 (NA) (NA) (NA) (NA)	19.3 22.3 24.0 25.0 20.6	275.7 301.1 301.8 302.2 226.4	17.4 20.5 21.6 22.1 18.2	33.1 37.4 39.2 41.3 33.4	231.3 251.8 250.2 248.0 187.5	516.5 559.8 491.7 492.8 449.9	548.3 705.4 671.7 513.9 383.1	1 058.1 1 277.6 1 136.2 1 010.7 824.3	27.7 33.5 22.7 24.1 11.6	174.2 216.7 230.9 221.1 179.4	72 (NA) (NA) (NA) (NA)	92 (NA) (NA) (NA) (NA)
1982 Census 1981 ASM 1980 ASM 1979 ASM 1978 ASM	72 (NA) (NA) (NA) (NA)	84 (NA) (NA) (NA) (NA)	61 (NA) (NA) (NA) (NA)	22.3 25.0 25.9 28.2 27.5	232.3 247.3 245.0 228.3 209.4	20.0 22.5 23.6 25.3 24.9	35.3 40.0 43.1 45.4 46.2	191.7 205.9 204.7 186.5 177.5	446.2 385.1 392.2 405.0 409.8	369.7 363.6 458.0 412.5 381.1	829.9 841.2 863.5 802.2 747.6	9.3 17.2 21.4 1032.7 21.9	167.4 218.0 197.5 189.7 170.4	88 (NA) (NA) (NA) (NA)	93 (NA) (NA) (NA) (NA)
1977 Census 1976 ASM 1975 ASM 1974 ASM 1973 ASM 1972 Census	80 (NA) (NA) (NA) (NA) 74	92 (NA) (NA) (NA) (NA) 87	74 (NA) (NA) (NA) (NA) (NA)	25.2 27.6 25.6 25.0 26.5 26.0	175.2 178.6 158.0 148.7 143.1 134.6	23.4 25.4 23.5 22.9 24.2 23.8	42.7 46.3 40.6 41.1 43.1 43.5	151.8 155.4 130.8 124.2 120.0	305.7 288.2 275.8 278.9 257.1 251.5	353.1 396.7 352.8 359.5 311.3 290.2	648.9 663.9 637.9 629.7 559.4 544.6	14.5 9.7 19.3 9.5 6.1 7.0	131.3 141.1 117.2 109.2 100.8 83.6	80 (NA) (NA) (NA) (NA) 90	86 (NA) (NA) (NA) (NA)
									LAR) KNIT F						
1987 Census 1986 ASM 1985 ASM 1984 ASM 1983 ASM	305 (NA) (NA) (NA) (NA)	334 (NA) (NA) (NA) (NA)	210 (NA) (NA) (NA) (NA)	34.9 26.8 25.7 29.7 31.2	577.7 444.0 418.6 420.3 432.1	29.2 22.3 21.1 24.7 25.7	57.3 43.9 41.4 46.2 53.0	424.6 323.5 299.6 306.3 316.1	1 425.6 927.4 744.7 772.1 876.7	2 183.0 1 642.2 1 430.2 1 534.7 1 715.6	3 578.5 2 562.2 2 174.3 2 319.1 2 570.6	95.8 70.6 66.5 68.8 53.2	295.8 206.1 190.3 193.5 271.4	94 (NA) (NA) (NA) (NA)	95 (NA) (NA) (NA) (NA)
1982 Census 1981 ASM 1980 ASM 1979 ASM 1978 ASM	384 (NA) (NA) (NA) (NA)	422 (NA) (NA) (NA) (NA)	222 (NA) (NA) (NA) (NA)	31.1 40.7 44.4 47.9 49.2	420.9 503.2 524.4 523.8 496.4	25.7 34.5 37.8 40.6 42.0	50.9 68.0 75.2 79.9 81.8	309.1 370.5 393.5 392.3 378.5	850.4 967.4 1 054.8 1 073.6 991.0	1 669.0 1 892.1 2 003.1 1 993.5 1 980.1	2 538.8 2 874.5 3 049.4 3 071.7 2 975.4	68.8 106.5 129.3 1085.6 86.1	254.8 284.6 322.5 316.7 323.2	92 (NA) (NA) (NA) (NA)	93 (NA) (NA) (NA) (NA)

#### Table 1a-1. Historical Statistics for the Industry (1987 Basis): 1987 and Earlier Years—Con.

[Industries with only 1987 data are revised for 1987. Table 1a-2 contains historical data on the old SIC basis. See table 1c-1 for composition of the new industry on the old SIC basis. Excludes data for auxiliaries. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

		All establ	ishments <sup>3</sup>	All em	ployees	Pro	duction wo	rkers						Rat	tios
Year <sup>1</sup>	Com- panies² (no.)	Total (no.)	With 20 employ- ees or more (no.)	Number (1,000)	Payroll (million dollars)	Number (1,000)	Hours (millions)	Wages (million dollars)	Value added by manufac- ture <sup>4</sup> (million dollars)	Cost of materials <sup>5</sup> (million dollars)	Value of shipments (million dollars)	New capital expend- itures <sup>5</sup> (million dollars)	End-of- year inven- tories <sup>4</sup> (million dollars)	Spe- ciali- zation <sup>7</sup> (per- cent)	Cover- age <sup>8</sup> (per- cent)
					INDU	STRY 22	57, WEFT	(CIRCULA	R) KNIT FAI	BRIC MILLS	-Con.				
1977 Census 1976 ASM 1975 ASM 1974 ASM 1973 ASM <sup>11</sup> 1972 Census	462 (NA) (NA) (NA) (NA) (NA) 629	530 (NA) (NA) (NA) (NA) (NA) 716	310 (NA) (NA) (NA) (NA) 430	51.8 53.9 56.5 64.8 68.9 68.1	493.0 483.2 473.5 505.2 522.5 492.6	44.0 45.7 47.6 54.1 58.3 57.3	88.2 93.2 94.4 110.9 119.7 121.7	371.2 351.7 345.9 370.8 384.4 362.1	1 033.5 974.9 982.7 953.2 1 072.0 1 036.0	2 141.1 1 824.9 1 782.6 1 890.3 1 848.7 1 800.8	3 169.4 2 816.5 2 791.1 2 860.1 2 915.1 2 808.8	91.6 87.1 94.2 115.5 155.9 270.1	316.2 280.4 289.9 303.2 352.8 336.4	90 (NA) (NA) (NA) (NA) 93	88 (NA) (NA) (NA) (NA)
					IN	DUSTRY	2258, LA	CE AND W	ARP KNIT F	ABRIC MILL	S <sup>12</sup>				
1987 Census	213	241	159	20.5	388.2	16.8	35.5	286.6	812.5	1 181.1	1 992.3	67.3	220.9	97	92
1986 ASM	(NA)	(NA)	(NA)	16.1	289.3	13.3	26.8	208.0	588.6	944.1	1 533.9	55.2	189.5	(NA)	(NA)
1985 ASM	(NA)	(NA)	(NA)	17.6	308.4	14.3	29.1	217.3	712.5	983.5	1 705.7	74.7	187.0	(NA)	(NA)
1984 ASM	(NA)	(NA)	(NA)	18.8	307.6	15.4	32.9	222.1	745.9	995.0	1 728.8	74.2	200.3	(NA)	(NA)
1983 ASM	(NA)	(NA)	(NA)	23.0	350.7	18.5	38.6	256.6	740.2	1 121.6	1 839.8	40.4	229.1	(NA)	(NA)
1982 Census	124	272	152	21.1	286.4	17.0	33.0	207.3	580.4	929.5	1 538.0	44.9	196.1	(NA)	(NA)
1981 ASM	(NA)	(NA)	(NA)	23.7	309.5	20.3	41.1	235.3	687.8	1 145.9	1 835.2	68.0	238.3	(NA)	(NA)
1980 ASM	(NA)	(NA)	(NA)	25.0	300.8	21.3	42.9	228.3	676.2	1 198.7	1 850.8	42.3	246.0	(NA)	(NA)
1979 ASM	(NA)	(NA)	(NA)	26.6	284.4	22.6	46.3	217.6	595.4	1 210.9	1 806.8	42.3	240.2	(NA)	(NA)
1978 ASM	(NA)	(NA)	(NA)	25.1	255.7	21.3	43.5	196.5	563.2	1 140.1	1 683.7	35.4	239.0	(NA)	(NA)
1977 Census	283	306	177	25.9	244.6	21.9	45.5	183.8	472.1	982.4	1 453.1	57.3	221.6	(NA)	(NA)
1976 ASM	(NA)	(NA)	(NA)	23.8	214.6	20.2	40.4	157.2	445.6	984.2	1 418.6	44.3	202.9	(NA)	(NA)
1975 ASM	(NA)	(NA)	(NA)	21,3	191.6	17.7	35.0	134.5	364.2	915.9	1 292.7	33.9	191.1	(NA)	(NA)
1974 ASM	(NA)	(NA)	(NA)	23.5	192.5	19.6	39.5	139.5	392.4	888.1	1 280.0	38.4	194.2	(NA)	(NA)
1973 ASM	(NA)	(NA)	(NA)	26.8	193.3	22.3	45.2	144.7	397.0	792.0	1 182.7	40.4	203.9	(NA)	(NA)
1972 Census	273	308	184	24.9	176.5	20.9	43.9	134.0	347.2	712.3	1 034.8	49.9	174.1	(NA)	(NA)
				, , , , , , , ,		INC	USTRY 2	259, KNIT	TING MILLS,	N.E.C.		1			
1987 Census	78	79	35	3.8	54.7	3.2	5.8	38.3	97.9	93.1	187.6	6.6	36.7	98	79
1986 ASM	(NA)	(NA)	(XA)	2.7	42.4	2.4	4.6	33.2	79.1	79.7	157.1	3.5	22.2	(NA)	(NA)
1985 ASM	(NA)	(NA)	(XA)	2.4	34.3	2.1	3.1	26.2	62.0	61.5	124.4	1.9	18.3	(NA)	(NA)
1984 ASM	(NA)	(NA)	(XA)	2.6	31.6	2.3	4.2	24.6	62.6	59.1	121.2	2.4	20.0	(NA)	(NA)
1983 ASM	(NA)	(NA)	(XA)	3.0	38.1	2.9	5.2	29.5	65.9	67.5	133.2	3.0	29.4	(NA)	(NA)
1982 Census	71	72	29	2.9	33.8	2.5	4.7	25.7	55.4	57.5	114.5	1.5	27.3	97	81
1981 ASM	(NA)	(NA)	(NA)	3.2	29.6	3.0	6.6	24.2	32.2	57.0	100.5	1.6	19.9	(NA)	(NA)
1980 ASM	(NA)	(NA)	(NA)	3.6	30.7	3.3	6.9	25.8	44.9	56.0	115.1	2.6	19.8	(NA)	(NA)
1979 ASM	(NA)	(NA)	(NA)	4.2	32.4	3.9	8.0	26.6	55.3	61.3	116.2	3.3	21.0	(NA)	(NA)
1978 ASM	(NA)	(NA)	(NA)	4.0	30.9	3.7	7.5	24.5	51.1	57.5	105.5	102.2	22.9	(NA)	(NA)
1977 Census	<sup>13</sup> 191	<sup>13</sup> 192	47	3.4	24.1	3.1	6.0	19.0	40.9	54.8	95.7	1.5	15.2	97	81
1976 ASM <sup>11</sup>	(NA)	(NA)	(NA)	3.1	29.3	2.6	5.8	22.6	51.0	55.8	108.0	2.3	18.5	(NA)	(NA)
1975 ASM <sup>11</sup>	(NA)	(NA)	(NA)	4.5	37.4	3.9	8.5	29.3	59.8	59.5	122.3	8.7	23.9	(NA)	(NA)
1974 ASM <sup>11</sup>	(NA)	(NA)	(NA)	4.7	31.7	4.0	8.0	25.4	61.3	58.3	118.0	5.1	21.9	(NA)	(NA)
1973 ASM	(NA)	(NA)	(NA)	4.1	25.4	3.5	7.0	19.5	44.8	38.3	83.3	2.2	16.8	(NA)	(NA)
1972 Census	72	73	33	3.9	23.1	3.3	6.5	17.4	41.8	32.2	73.1	2.0	13.9	93	78

¹In annual survey of manufactures (ASM) years, data are estimates based on a representative sample of establishments canvassed annually and may differ from results of a complete canvass of all establishments. ASM publication shows percentage standard errors. Unless otherwise noted, for data prior to 1972, see 1972 Census of Manufactures, vol. II, table 1a of the Industry

canvass of all establishments. As M publication shows percentage standard enois. Onlines of the Canada prior to 1912, control of the Canada prior to 1912 and prior to 1912 an

#### Table 1a-2. Historical Statistics for the Industry (1972 Basis): 1987 and Earlier Years

[Table 1a-2 contains the historical data on the old SIC basis. See table 1c-1 for composition of the new industry on the old SIC basis. Excludes data for auxiliaries. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

		All estab	ishments	All em	ployees	Pro	duction wor	rkers						Rat	ios
Year	Com- panies (no.)	Total (no.)	With 20 employ- ees or more (no.)	Number (1,000)	Payroll (million dollars)	Number (1,000)	Hours (millions)	Wages (million dollars)	Value added by manufac- ture (million dollars)	Cost of materials (million dollars)	Value of shipments (million dollars)	New capital expenditures (million dollars)	End-of- year inven- tories (million dollars)	Spe- cial- ization (per- cent)	Cover- age (per- cent)
						INDU	STRY 22	58, WARP	KNIT FABRI	C MILLS					
1987 Census 1986 ASM 1985 ASM 1984 ASM 1983 ASM	164 (NA) (NA) (NA) (NA)	183 (NA) (NA) (NA) (NA)	131 (NA) (NA) (NA) (NA)	18.4 14.1 15.4 16.4 20.8	348.4 260.6 278.4 275.6 322.9	15.1 11.6 12.4 13.3 17.1	31.9 24.1 25.8 29.1 35.2	257.0 185.6 193.2 196.4 234.8	741.0 542.0 658.4 688.9 688.1	1 117.9 917.8 956.3 965.1 1 091.0	1 856.9 1 457.7 1 624.5 1 643.1 1 761.6	64.0 53.3 73.0 72.9 40.1	210.1 181.2 174.5 184.9 210.2	(NA) (NA) (NA) (NA) (NA)	(NA) (NA) (NA) (NA) (NA)
1982 Census 1981 ASM 1980 ASM 1979 ASM 1978 ASM	61 (NA) (NA) (NA) (NA)	207 (NA) (NA) (NA) (NA)	128 (NA) (NA) (NA) (NA)	19.0 21.5 22.7 24.4 23.0	261.1 283.7 277.7 264.0 238.3	15.2 18.3 19.2 20.6 19.4	29.7 37.4 39.0 42.5 40.1	187.2 215.0 209.7 200.6 182.7	533.9 637.6 636.6 558.4 538.3	904.0 1 117.2 1 171.8 1 186.7 1 125.0	1 465.8 1 758.6 1 785.1 1 745.8 1 642.5	44.0 67.4 41.9 41.4 34.7	182.4 225.0 232.7 228.3 228.1	97 (NA) (NA) (NA) (NA)	90 (NA) (NA) (NA) (NA)
1977 Census 1976 ASM 1975 ASM 1974 ASM 1973 ASM 1972 Census	215 (NA) (NA) (NA) (NA) 174	235 (NA) (NA) (NA) (NA) 203	153 (NA) (NA) (NA) (NA) 155	23.7 21.3 19.2 21.2 24.2 22.0	226.7 198.6 178.7 178.1 177.4 159.2	20.0 18.0 15.9 17.6 20.0 18.4	41.9 36.6 31.8 35.8 40.9 39.2	169.8 145.3 125.6 129.1 132.3 120.5	444.4 423.5 344.9 371.0 372.1 317.8	963.9 971.6 907.6 880.5 774.0 694.2	1 407.2 1 384.8 1 264.8 1 251.4 1 138.9 987.7	56.3 42.0 33.6 38.3 40.1 48.2	209.0 194.5 185.5 187.7 195.8 166.4	93 (NA) (NA) (NA) (NA) 90	83 (NA) (NA) (NA) (NA) 95
							INDUST	RY 2292,	LACE GOOD	s					
1987 Census 1986 ASM 1985 ASM 1984 ASM 1983 ASM	49 (NA) (NA) (NA) (NA)	58 (NA) (NA) (NA) (NA)	28 (NA) (NA) (NA) (NA)	2.1 2.0 2.2 2.4 2.2	39.8 28.7 30.0 32.0 27.8	1.8 1.7 1.9 2.1 1.4	3.6 2.7 3.3 3.8 3.4	29.6 22.4 24.1 25.7 21.8	71.5 46.6 54.1 57.0 52.1	63.2 26.3 27.2 29.9 30.6	135.5 76.2 81.2 85.7 78.2	3.3 1.9 1.7 1.3	10.7 8.3 12.5 15.4 18.9	(NA) (NA) (NA) (NA) (NA)	(NA) (NA) (NA) (NA) (NA)
1982 Census 1981 ASM 1980 ASM 1979 ASM 1978 ASM	63 (NA) (NA) (NA) (NA)	65 (NA) (NA) (NA) (NA)	24 (NA) (NA) (NA) (NA)	2.1 2.2 2.3 2.2 2.1	25.3 25.8 23.1 20.4 17.4	1.8 2.0 2.1 2.0 1.9	3.3 3.7 3.9 3.8 3.4	20.1 20.3 18.6 17.0 13.8	46.5 50.2 39.6 37.0 24.9	25.5 28.7 26.9 24.2 15.1	72.2 76.6 65.7 61.0 41.2	.9 .6 .4 .9	13.7 13.3 13.3 11.9 10.9	97 (NA) (NA) (NA) (NA)	94 (NA) (NA) (NA) (NA)
1977 Census 1976 ASM 1975 ASM 1974 ASM 1973 ASM 1972 Census	68 (NA) (NA) (NA) (NA)	71 (NA) (NA) (NA) (NA) 105	24 (NA) (NA) (NA) (NA) 29	2.2 2.5 2.1 2.3 2.6 2.9	17.9 16.0 12.9 14.4 15.9 17.3	1.9 2.2 1.8 2.0 2.3 2.5	3.6 3.8 3.2 3.7 4.3 4.7	14.0 11.9 8.9 10.4 12.4 13.5	27.7 22.1 19.3 21.4 24.9 29.4	18.5 12.6 8.3 7.6 18.0 18.1	45.9 33.8 27.9 28.6 43.8 47.1	1.0 2.3 .3 .1 .3 1.7	12.6 8.4 5.6 6.5 8.1 7.7	98 (NA) (NA) (NA) (NA) 93	98 (NA) (NA) (NA) (NA) (NA)

Note: For qualifications of data, see footnotes on table 1a.

#### Table 1b-1. Selected Operating Ratios for the Industry (1987 Basis): 1987 and Earlier Years

[Industries with only 1987 data are revised for 1987. Table 1b-2 contains historical data on the old SIC basis. See table 1c-1 for composition of the new industry on the old SIC basis. Excludes data for auxiliaries. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Year	Payroll per employee (dollars)	Production workers as percent of total employment (percent)	Annual hours of production workers (number)	Average hourly earnings of production workers (dollars)	Cost of materials as percent of value of shipments (percent)	Cost of materials and payroll as percent of value of shipments (percent)	Value added per employee (dollars)	Payroll as percent of value added (percent)	Value added per production worker hour (dollars)
			IND	USTRY 2251, W	OMEN'S HOSIE	RY, EXCEPT SO	OCKS		
1987 Census 1986 ASM 1985 ASM 1984 ASM 1983 ASM 1983 ASM 1982 Census 1981 ASM 1980 ASM 1979 ASM	13 171 13 146 12 441 11 926 11 509 10 301 9 780 9 229 8 541 8 007	88 89 89 88 89 88 86 87 87 88	2 073 2 070 2 026 1 913 1 935 1 858 1 945 1 905 1 905 1 822	5.98 5.48 5.24 5.47 5.24 4.87 4.54 4.41 4.08 3.97	48 44 42 42 43 45 46 47 46 48	74 68 66 64 66 67 69 70	26 263 31 052 29 675 31 064 29 318 25 742 23 949 21 748 20 471 18 604	50 42 42 38 39 40 41 42 42 43	14.33 16.87 16.47 18.43 16.97 15.67 14.35 13.07 12.24 11.58
1977 Census	7 191 6 791 6 095 5 602 5 100 4 997	89 89 88 87 88	1 853 1 826 1 761 1 739 1 740 1 839	3.55 3.37 3.14 2.90 2.68 2.49	48 50 53 56 57 54	70 75 77 81 83	17 180 13 727 10 951 9 401 8 283 8 865	42 49 56 60 62 56	10.36 8.41 7.08 6.19 5.42 5.48

### Table 1b-1. Selected Operating Ratios for the Industry (1987 Basis): 1987 and Earlier Years —Con.

[Industries with only 1987 data are revised for 1987. Table 1b-2 contains historical data on the old SIC basis. See table 1c-1 for composition of the new industry on the old SIC basis. Excludes data for auxiliaries. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

data for auxiliaries. For	meaning of abbrevi	ations and symbols,	see introductory t	ext. For explanatio	n of terms, see ap	pendixes]	action of the flew int	usuy on the old sit	Dasis. Excludes
Year	Payroll per employee (dollars)	Production workers as percent of total employment (percent)	Annual hours of production workers (number)	Average hourly earnings of production workers (dollars)	Cost of materials as percent of value of shipments (percent)	Cost of materials and payroll as percent of value of shipments (percent)	Value added per employee (dollars)	Payroll as percent of value added (percent)	Value added per production worker hour (dollars)
				INDUSTR	Y 2252, HOSIE	RY, N.E.C.			
1987 Census	12 818 12 604 12 189 11 308 11 145	89 88 88 86 90	1 834 1 830 1 828 1 878 1 842	8.24 8.09 5.83 5.46 5.32	52 55 55 56 54	78 81 80 80 77	28 304 22 392 22 022 21 252 22 964	49 58 55 53 49	16.11 13.93 13.69 13.18 13.78
1982 Census	10 015 9 825 8 990 8 332 7 471	88 87 87 88 90	1 778 1 915 1 900 1 918 1 872	5.04 4.55 4.25 3.94 3.63	58 60 59 59 56	80 83 64 84 80	18 938 17 392 15 328 13 942 14 289	53 56 59 60 52	12.08 10.39 9.27 8.28 8.46
1977 Census	6 791 6 403 5 772 5 530 5 113 4 898	90 89 89 90 90	1 814 1 778 1 673 1 747 1 787 1 836	3.41 3.27 3.10 2.74 2.61 2.39	57 58 50 58 53 52	81 80 74 82 80 78	12 469 11 848 11 929 9 387 9 138 9 055	54 54 48 59 56 54	7.83 7.52 7.97 5.99 5.76 5.49
				INDUSTRY 22	53, KNIT OUTE	RWEAR MILLS			
1987 Census	14 210 13 657 13 240 12 315 11 574	88 85 84 84 85	1 915 1 852 1 837 1 909 1 806	6.39 6.32 8.21 5.58 5.56	50 51 53 49 47	75 74 78 72 72	28 437 28 068 26 721 28 118 24 733	50 49 50 44 47	17.31 17.81 17.24 17.46 16.09
1982 Census	11 098 10 545 9 499 8 854 8 439	84 85 86 86 87	1 825 1 825 1 796 1 790 1 791	5.29 5.05 4.61 4.24 4.04	46 49 49 51 49	70 73 74 75 76	25 521 22 267 19 957 17 706 16 682	43 47 48 50 51	16.71 14.28 12.88 11.46 10.69
1977 Census	7 972 7 585 7 389 6 750 6 130 5 784	86 86 85 86 87 88	1 818 1 833 1 856 1 839 1 889 1 882	3.70 3.49 3.39 3.09 2.81 2.65	52 53 51 52 52 54	77 78 75 77 77 79	15 884 14 349 14 578 13 097 11 690 10 746	50 53 51 52 52 52 54	10.17 9.13 9.24 8.25 7.09 6.53
				INDUSTRY 22	54, KNIT UNDE	RWEAR MILLS			
1987 Census	14 285 13 502 12 575 12 088 10 990	90 92 90 88 88	1 902 1 824 1 815 1 869 1 835	6.99 6.73 6.38 6.00 5.61	52 55 59 51 46	78 79 86 81 74	26 762 25 103 20 488 19 712 21 840	53 54 61 61 50	15.60 14.97 12.54 11.93 13.47
1982 Census	10 417 9 892 9 459 8 095 7 614 6 952	90 90 91 90 91	1 765 1 778 1 826 1 794 1 855	5.43 5.15 4.75 4.11 3.84 3.56	45 43 53 51 51	73 73 81 80 79	20 009 15 404 15 143 14 362 14 902 12 131	52 64 62 56 51	12.64 9.63 9.10 8.92 8.87
1976 ASM	6 471 6 171 5 948 5 400 5 176	92 92 92 92 91 91	1 825 1 823 1 728 1 795 1 781 1 828	3.36 3.22 3.02 2.78 2.57	54 60 55 57 56 53	87 80 81 81 78	10 442 10 773 11 156 9 702 9 673	57 62 57 53 56 54	7.16 6.22 6.79 6.79 5.97 5.78
			INDU	STRY 2257, WE	FT (CIRCULAR	) KNIT FABRIC	MILLS		
1987 Census	16 553 16 567 16 287 14 151 13 849	84 83 82 83 82	1 962 1 969 1 962 1 870 2 062	7.41 7.37 7.24 6.63 5.96	61 64 66 66 67	77 81 85 84 84	40 848 34 604 28 977 25 997 28 099	41 48 56 54 49	24.88 21.13 17.99 16.71 16.54
1982 Census	13 533 12 363 11 810 10 935 10 089 9 517	83 85 85 85 85 85	1 981 1 971 1 989 1 968 1 948	6.07 5.45 5.23 4.91 4.63	66 66 65 67	82 83 83 82 83	27 344 23 769 23 757 22 413 20 142	49 52 50 49 50 48	16.71 14.23 14.03 13.44 12.11
1976 ASM	8 964 8 380 7 796 7 583 7 233	85 84 83 85 84	2 005 2 039 1 983 2 050 2 053 2 124	4.21 3.77 3.66 3.34 3.21 2.98	65 64 66 63 64	83 82 81 84 81 82	19 952 18 087 17 393 14 710 15 559 15 213	50 48 53 49 48	11.72 10.46 10.41 8.60 8.96 8.51
			INDL	JSTRY 2258, LA	CE AND WARP	KNIT FABRIC N	IILLS		
1987 Census	18 937 17 968 17 522 16 361 15 247	82 83 81 82 80	2 113 2 015 2 035 2 136 2 086	8.07 7.76 7.47 6.75 6.65	59 62 58 58 61	79 80 76 75 80	39 634 36 559 40 483 39 676 32 183	48 49 43 41 47	22.89 21.96 24.48 22.67 19.18
1982 Census	13 573 13 059 12 032 10 691 10 187	81 86 85 85 85	1 941 2 025 2 014 2 049 2 042	6.28 5.73 5.32 4.70 4.52	60 62 65 67 68	79 79 81 83 83	27 507 29 021 27 048 22 383 22 438	49 45 44 48 45	17.59 16.73 15.76 12.86 12.95

### Table 1b-1. Selected Operating Ratios for the Industry (1987 Basis): 1987 and Earlier Years -Con.

[Industries with only 1987 data are revised for 1987. Table 1b-2 contains historical data on the old SIC basis. See table 1c-1 for composition of the new industry on the old SIC basis. Excludes data for auxiliaries. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Year	Payroll per employee (dollars)	Production workers as percent of total employment (percent)	Annual hours of production workers (number)	Average hourly earnings of production workers (dollars)	Cost of materials as percent of value of shipments (percent)	Cost of materials and payroll as percent of value of shipments (percent)	Value added per employee (dollars)	Payroll as percent of value added (percent)	Value added per production worker hour (dollars)		
		INDUSTRY 2258, LACE AND WARP KNIT FABRIC MILLS—Con.									
1977 Census	9 444	85	2 078	4.04	68	84	18 228	52	10.38		
	9 016	85	2 000	3.89	69	85	18 723	48	11.03		
	8 995	83	1 977	3.84	71	86	17 099	53	10.41		
	8 191	83	2 015	3.53	69	84	16 698	49	9.93		
	7 212	83	2 027	3.20	67	83	14 813	49	8.78		
	7 088	84	2 100	3.05	69	86	13 944	51	7.91		
				INDUSTRY 2	259, KNITTING	MILLS, N.E.C.					
1987 Census	14 395	84	1 813	6.60	50	79	25 763	56	16.88		
	15 703	89	1 917	7.22	51	78	29 296	54	17.20		
	14 291	88	1 476	8.45	49	77	25 833	55	20.00		
	12 153	88	1 826	5.86	49	75	24 077	50	14.90		
	12 700	97	1 793	5.67	51	79	21 967	58	12.67		
1982 Census	11 655	86	1 880	5.47	50	80	19 103	61	11.79		
	9 250	94	2 200	3.67	57	86	10 063	92	4.88		
	8 527	92	2 091	3.74	49	75	12 472	68	6.51		
	7 714	93	2 051	3.32	53	81	13 167	59	6.91		
	7 725	93	2 027	3.27	55	84	12 775	60	6.81		
1977 Census	7 088	91	1 935	3.17	57	82	12 029	59	6.82		
	9 451	84	2 231	3.90	52	79	16 452	57	8.79		
	8 311	87	2 179	3.45	49	79	13 289	63	7.04		
	6 744	85	2 000	3.17	49	76	13 043	52	7.66		
	6 195	85	2 000	2.79	46	76	10 927	57	6.40		
	5 923	85	1 970	2.68	44	76	10 718	55	6.43		

Note: For qualifications of data, see footnotes on table 1a.

#### Table 1b-2. Selected Operating Ratios for the Industry (1972 Basis): 1987 and Earlier Years

[Table 1b-2 contains the historical data on the old SIC basis. See table 1c-1 for composition of the new industry on the old SIC basis. Excludes data for auxiliaries. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Year	Payroll per employee (dollars)	Production workers as percent of total employment (percent)	Annual hours of production workers (number)	Average hourly earnings of production workers (dollars)	Cost of materials as percent of value of shipments (percent)	Cost of materials and payroll as percent of value of shipments (percent)	Value added per employee (dollars)	Payroll as percent of value added (percent)	Value added per production worker hour (dollars)
				INDUSTRY 22	58, WARP KNIT	FABRIC MILLS			
1987 Census	18 935 18 482 18 077 16 804 15 524	82 82 81 81 81 82	2 113 2 078 2 081 2 188 2 058	8.06 7.70 7.49 6.75 6.67	60 63 59 59 62	79 81 76 76 80	40 272 38 440 42 753 42 006 33 082	47 48 42 40 47	23.23 22.49 25.52 23.67 19.55
1982 Census	13 742	80	1 954	6.30	62	79	28 100	49	17.98
	13 195	85	2 044	5.75	64	80	29 656	44	17.05
	12 233	85	2 031	5.38	66	81	28 044	44	16.32
	10 819	84	2 063	4.72	68	83	22 885	47	13.14
	10 360	84	2 067	4.56	68	83	23 404	44	13.42
1977 Census	9 565	84	2 095	4.05	68	85	18 751	51	10.61
	9 323	85	2 033	3.97	70	85	19 883	47	11.57
	9 307	83	2 000	3.95	72	86	17 964	52	10.85
	8 400	83	2 034	3.61	70	85	17 500	48	10.36
	7 330	83	2 045	3.23	68	84	15 376	48	9.10
	7 236	84	2 130	3.07	70	86	14 445	50	8.11
				INDUS	TRY 2292, LACE	GOODS			
1987 Census	18 952	86	2 000	8.22	47	76	34 048	56	19.86
	14 350	85	1 588	8.30	35	72	23 300	62	17.26
	13 636	86	1 737	7.30	33	70	24 591	55	16.39
	13 333	88	1 810	6.76	35	72	23 750	56	15.00
	12 636	64	2 429	6.41	39	75	23 682	53	15.32
1982 Census	12 047	86	1 833	6.09	35	70	22 143	54	14.09
	11 727	91	1 850	5.49	37	71	22 818	51	13.57
	10 043	91	1 857	4.77	41	76	17 217	58	10.15
	9 272	91	1 900	4.47	40	73	16 818	55	9.74
	8 285	91	1 789	4.06	37	79	11 857	70	7.32
1977 Census	8 136	86	1 895	3.89	40	79	12 591	65	7.69
	6 400	88	1 727	3.13	37	85	8 840	72	5.82
	6 142	86	1 778	2.78	30	76	9 190	67	6.03
	6 260	87	1 850	2.81	27	77	9 304	67	5.78
	6 115	88	1 870	2.88	41	77	9 577	64	5.79
	5 965	86	1 880	2.87	38	75	10 138	59	6.26

Note: For qualifications of data, see footnotes on table 1a.

### Table 1c-1. 1987 Statistics for the Industry Showing the Distribution of 1987 SIC-Based Industries Among 1972 SIC-Based Industries

[Excludes data for auxiliaries. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

		All em	ployees	Pro	duction wo	rkers	Value added by			New	End-of-
Industry	All estab- lish- ments (number)	Number (1,000)	Payroll (million dollars)	Number (1,000)	Hours (millions)	Wages (million dollars)	manufac- ture (million dollars)	Cost of materials (million dollars)	Value of shipments (million dollars)	capital expend- itures (million dollars)	year inven- tories (million dollars)
New Industry 2258, Lace and Warp Knit Fabric Mills Old Industry 2258, Warp Knit Fabric Mills Old Industry 2292, Lace Goods	241 183 58	20.5 18.4 2.1	388.2 348.4 39.8	16.8 15.1 1.8	35.5 31.9 3.6	286.6 257.0 29.6	812.5 741.0 71.5	1 181.1 1 117.9 63.2	1 992.3 1 856.9 135.5	67.3 64.0 3.3	220.9 210.1 10.7

Note: For qualifications of data, see footnotes on table 1a.

### Table 1c-2. 1987 Statistics for the Industry Showing the Distribution of 1972 SIC-Based Industries Among 1987 SIC-Based Industries

[Excludes data for auxiliaries. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

		All em	ployees	Pro	duction wo	rkers	Value		,	New	Endot
Industry	All estab- lish- ments (number)	Number (1,000)	Payroll (million dollars)	Number (1,000)	Hours (millions)	Wages (million dollars)	added by manufac- ture (million dollars)	Cost of materials (million dollars)	Value of shipments (million dollars)	capital expend- itures (million dollars)	End-of- year inven- 'tories (million dollars)
Old Industry 2258, Warp Knit Fabric Mills New Industry 2258, Lace and Warp Knit Fabric	183	18.4	348.4	15.1	31.9	257.0	741.0	1 117.9	1 856.9	64.0	210.1
Mills	183	18.4	348.4	15.1	31.9	257.0	741.0	1 117.9	1 856.9	64.0	210.1
Oid Industry 2292, Lace Goods New Industry 2258, Lace and Warp Knit Fabric	58	2.1	39.8	1.8	3.6	29.6	71.5	63.2	135.5	3.3	10.7
Mills	58	2.1	39.8	1.8	3.6	29.6	71.5	63.2	135.5	3.3	10.7

Note: For qualifications of data, see footnotes on table 1a.

#### Table 2. Industry Statistics for Selected States: 1987 and 1982

[Excludes data for auxiliaries. States with 150 employees or more are shown. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

							198	,						1982
		All establ	ishments	All emp	oloyees	Pro	duction wor	kers						
Industry and geographic area	E¹	Total (no.)	With 20 employ- ees or more (no.)	Number <sup>2</sup> (1,000)	Payroll (million dollars)	Number (1,000)	Hours (millions)	Wages (million dollars)	Value added by manufac- ture (million dollars)	Cost of materials (million dollars)	Value of shipments (million dollars)	New capital expend- itures (million dollars)	All employ- ees <sup>2</sup> (1,000)	Value added by manufac- ture (million dollars)
INDUSTRY 2251, WOMEN'S HOSIERY, EXCEPT SOCKS														
United States	-	161	93	29.3	3 <b>8</b> 5.9	25.9	53.7	3 <b>21.1</b>	769.5	715.6	1 497.5	32.3	30.2	777.4
Florida	-	4 1 1 1	2 1 1 1	CC CC AA EE CC	00000	00000	(D) (D) (D) (D)	(D) (D) (D) (D)	(D) (D) (D) (D) (D)	(D) (D) (D) (D)	(D) (D) (D) (D)	(D) (D) (D) (D)	88° 888	(D) (D) 5.5 (D) (D)
North Carolina Pennsylvania South Carolina Tennessee	1 E4	93 13 8 5	70 3 7 3	18.3 .2 FF FF	232.5 2.7 (D) (D)	16.4 .2 (D) (D)	32.6 .3 (D) (D)	191.7 1.9 (D) (D)	403.0 5.9 (D) (D)	478.6 3.7 (D) (D)	897.5 10.0 (D) (D)	18.5 .1 (D) (D)	20.6 .4 FF FF	454.6 4.9 (D) (D)
INDUSTRY 2252, HOSIERY, N.E.C.														
United States	-	426	276	36.5	467.8	3 <b>2.</b> 5	59.6	372.0	960.1	1 008.9	1 952.1	64.6	32.6	617.3
Alabama	-	74 14 1 2 3	36 12 1 2 1	3.3 EE AA BB AA	39.4 (D) (D) (D) (D)	3.0 (D) (D) (D)	5.5 (D) (D) (D) (D)	31.2 (D) (D) (D) (D)	73.9 (D) (D) (D) (D)	92.9 (D) (D) (D) (D)	165.9 (D) (D) (D) (D)	3.1 (D) (D) (D) (D)	2.0 1.8 (NA) BB AA	33.8 33.8 (NA) (D) (D)
North Carolina Pennsylvania Tennessee Virginia West Virginia Wisconsin	E1	265 9 23 8 2 3	182 5 20 5 1 3	24.1 1.2 3.3 CC AA CC	310.8 15.1 41.7 (D) (D) (D)	21.4 1.1 3.0 (D) (D)	39.1 1.9 5.5 (D) (D) (D)	248.4 13.4 32.7 (D) (D)	630.4 51.1 84.2 (D) (D) (D)	654.0 37.7 81.3 (D) (D) (D)	1 268.5 90.4 163.4 (D) (D)	46.4 (D) 6.6 (D) (D) (D)	20.2 1.5 4.0 BB AA CC	366.5 33.5 79.4 (D) (D) (D)

#### Table 2. Industry Statistics for Selected States: 1987 and 1982-Con.

[Excludes data for auxiliaries. States with 150 employees or more are shown. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

[Excludes data for auxiliaries. States	s with	i iso emp	loyees or	more are s	nown. For r	nearing or	198		ibois, see introd	uctory text.	or explanation	or terms, s		1982
		All establ	ishments	All em	ployees	Pro	duction wo	rkers						
Industry and geographic area	E¹	Total (no.)	With 20 employ- ees or more (no.)	Number <sup>2</sup> (1,000)	Payroll (million dollars)	Number (1,000)	Hours (millions)	Wages (million dollars)	Value added by manufac- ture (million dollars)	Cost of materials (million dollars)	Value of shipments (million dollars)	New capital expend- itures (million dollars)	All employ- ees <sup>2</sup> (1,000)	Value added by manufac- ture (million dollars)
INDUSTRY 2253, KNIT OUTERWEAR MILLS														
United States	E1	8 <b>24</b>	<b>44</b> 0	<b>5</b> 9.0	838.4 (D)	50.6	96.9 (D)	619.1 (D)	1 677.8 (D)	1 614.4 (D)	3 <b>255.2</b> (D)	94.0	66.8 EE	1 704.8
Alabama California Connecticut Florida Georgia	E4 E1 E6	71 5 28 7	33 4 15 4	FF BB EE BB	00000	(D) (D) (D) (D)	99996	00000	0000	(D) (D) (D)	(D) (D) (D)	(D) (D) (D) (D) (D)	2.6 CC .8	(D) 56.9 (D) 12.7 9.0
Illinois	E9 E9 - -	9 4 3 15 5	4 2 1 8 3	AA AA BB EE CC	(D) (D) (D) (D) (D) (D)	(D) (D) (D) (D)	(D) (D) (D) (D) (D)	(D) (D) (D) (D)	(D) (D) (D) (D)	(D) (D) (D) (D)	(D) (D) (D) (D) (D)	(D) (D) (D) (D)	.3 (NA) AA 1.8 .6	8.5 (NA) (D) 33.7 13.9
Mississippi New Hampshire New Jersey New York North Carolina	E2 E2 E3	4 11 73 371 55	3 5 41 179 39	EE CC 2.6 12.7 FF	(D) (D) 40.2 184.4 (D)	(D) (D) 2.3 11.2 (D)	(D) (D) 4.4 21.5 (D)	(D) (D) 29.3 139.5 (D)	(D) (D) 70.4 332.2 (D)	(D) (D) 63.5 310.5 (D)	(D) (D) 135.0 642.5 (D)	(D) (D) 2.4 (D) (D)	EE CC 3.3 11.4 11.1	(D) (D) 71.5 297.6 325.1
Ohio Oregon Pennsylvania South Carolina Tennessee	E2 - - E1	8 5 52 12 16	5 2 38 10 12	EE BB 5.7 2.5 2.1	(D) (D) 83.8 30.4 24.9	(D) (D) 4.7 2.1 1.6	(D) (D) 9.0 4.0 3.1	(D) (D) 58.7 21.6 15.6	(D) (D) 225.3 64.5 116.9	(D) (D) 213.0 60.6 33.4	(D) (D) 433.0 122.0 139.9	(D) (D) 7.0 (D) (D)	1.3 .2 13.2 FF 1.6	44.6 4.3 331.4 (D) 34.9
Texas Virginia West Virginia Wisconsin	E4 - -	7 10 1 7	2 8 1 4	AA FF BB BB	(D) (D) (D) (D)	(D) (D) (D)	(D) (D) (D)	(D) (D) (D) (D)	(D) (D) (D) (D)	(D) (D) (D) (D)	(D) (D) (D) (D)	(D) (D) (D) (D)	.4 FF BB 1.5	7.8 (D) (D) 45.9
INDUSTRY 2254, KNIT UNDERWEAR MILLS														
United States  Georgia Kentucky Louisiana Mississippi New York	-	63 3 1 1 3 15	44 2 1 1 3 7	19.3 EE FF EE EE EE	275.7 (D) (D) (D) (D) (D)	17.4 (D) (D) (D) (D)	33.1 (D) (D) (D) (D) (D)	231.3 (D) (D) (D) (D) (D)	5 <b>16.5</b> (D) (D) (D) (D) (D)	548.3 (D) (D) (D) (D) (D)	1 058.1 (D) (D) (D) (D) (D)	27.7 (D) (D) (D) (D)	22.3 1.0 FF (NA) EE 1.0	29.7 (D) (NA) (D) 36.2
North Carolina	-	10 1 16 2 1	9 1 11 2 1	3.9 BB 1.9 EE EE	50.1 (D) 24.8 (D) (D)	3.5 (D) 1.5 (D) (D)	6.8 (D) 2.7 (D) (D)	38.9 (D) 16.3 (D) (D)	96.6 (D) 55.6 (D) (D)	82.9 (D) 47.9 (D) (D)	180.5 (D) 97.6 (D) (D)	4.3 (D) (D) (D) (D)	6.4 Bb 3.5 FF EE	99.8 (D) 60.4 (D) (D)
INDUSTRY 2257, WEFT (CIRCULAR) KNIT FABRIC MILLS														
United States	- E5 E2	334 7 18 6 7 6	210 7 13 3 6 5	34.9 EE EE AA EE EE	577.7 (D) (D) (D) (D) (D)	29.2 (D) (D) (D) (D) (D)	57.3 (D) (D) (D) (D) (D)	424.6 (D) (D) (D) (D) (D)	1 425.6 (D) (D) (D) (D) (D)	2 183.0 (D) (D) (D) (D) (D)	3 578.5 (D) (D) (D) (D) (D)	95.8 (D) (D) (D) (D) (D)	31.1 CC .7 .6 1.3 EE	850.4 (D) 21.0 16.9 38.9 (D)
	E7 E1 E5 E1	4 24 85 99 29	4 12 27 84 17	BB 1.1 EE 15.5 1.4	(D) 20.4 (D) 250.7 26.2	(D) .9 (D) 13.3 1.2	(D) 1.7 (D) 26.6 2.6	(D) 15.3 (D) 191.8 19.5	(D) 37.0 (D) 638.8 59.9	(D) 48.2 (D) 1 141.7 59.8	(D) 84.4 (D) 1 763.4 119.3	(D) 1.6 (D) 47.2 3.0	AA 1.7 2.7 13.7 1.9	(D) 42.9 79.5 324.5 42.3
Rhode Island	11111	8 20 7 2 4	3 15 6 2 3	AA 2.1 1.8 FF BB	(D) 35.9 32.4 (D) (D)	(D) 1.7 1.6 (D) (D)	(D) 3.6 3.1 (D) (D)	(D) 25.1 24.5 (D) (D)	(D) 95.5 95.2 (D) (D)	(D) 110.8 100.7 (D) (D)	(D) 205.7 188.2 (D) (D)	(D) 7.0 (D) (D) (D)	(NA) 1.5 EE EE CC	(NA) 37.0 (D) (D) (D)
INDUSTRY 2258, LACE AND WARP KNIT FABRIC MILLS														
United States	-	241	159	20.5	388.2	16.8	35.5	286.6	812.5	1 181.1	1 992.3	67.3	21.1	580.4
Alabama California Connecticut Florida Georgia	E4 E1 E5	2 5 6 7 5	2 3 4 3 5	AA BB CC BB CC	(D) (D) (D) (D) (D)	0000	(D) (D) (D) (D)	00000	(D) (D) (D) (D)	(D) (D) (D) (D)	(D) (D) (D) (D)	(D) (D) (D) (D) (D)	(NA) (NA) (NA) (NA) (NA)	(NA) (NA) (NA) (NA) (NA)
Kentucky	E1	1 2 3 60 44	1 2 3 27 22	AA AA AA 1.9 FF	(D) (D) (D) 38.7 (D)	(D) (D) (D) 1.6 (D)	(D) (D) (D) 3.3 (D)	(D) (D) (D) 28.5 (D)	(D) (D) (D) 71.8 (D)	(D) (D) (D) 83.5 (D)	(D) (D) (D) 154.7 (D)	(D) (D) (D) 2.9 (D)	(NA) (NA) (NA) 1.7 2.7	(NA) (NA) (NA) 41.2 64.2

#### Table 2. Industry Statistics for Selected States: 1987 and 1982-Con.

[Excludes data for auxiliaries. States with 150 employees or more are shown. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

· · · · · · · · · · · · · · · · · · ·							198	7						1982
		All establ	ishments	Ali emp	oloyees	Pro	duction wor	kers						
Industry and geographic area	E¹	Total (no.)	With 20 employ- ees or more (no.)	Number <sup>2</sup> (1,000)	Payroll (million dollars)	Number (1,000)	Hours (millions)	Wages (million dollars)	Value added by manufac- ture (million dollars)	Cost of materials (million dollars)	Value of shipments (million dollars)	New capital expend- itures (million dollars)	All employ- ees <sup>2</sup> (1,000)	Value added by manufac- ture (million dollars)
INDUSTRY 2258, LACE AND WARP KNIT FABRIC MILLS —Con.														
North Carolina	E1 -	45 17 17 9 5	41 14 12 6 5	6.8 2.2 1.2 1.0 1.1 AA	127.5 44.2 23.5 22.0 19.5 (D)	5.6 1.7 1.0 .8 .9 (D)	12.6 3.5 2.1 1.6 1.9 (D)	97.5 33.5 16.7 12.7 15.7 (D)	270.4 95.1 47.5 48.4 14.6 (D)	405.0 145.3 73.0 86.9 84.6 (D)	669.6 234.8 122.2 134.2 109.3 (D)	35.8 3.9 (D) 4.9 3.4 (D)	(NA) (NA) 1.5 (NA) (NA) (NA)	(NA) (NA) 40.0 (NA) (NA) (NA)
INDUSTRY 2259, KNITTING MILLS, N.E.C.												- 1		
United States	E1	<b>7</b> 9	35	3.8	54.7	3.2	5.8	3 <b>8.</b> 3	97.9	93.1	187.6	6.6	<b>2.</b> 9	55.4
Illinois	E4 E1 E6	2 5 22 16 6 1	2 4 7 7 2 1	AA .2 CC EE .2 CC	(D) 2.4 (D) (D) 2.2 (D)	(D) .2 (D) (D) .2 (D)	(D) -4 (O) (O) -3 (O)	(D) 1.8 (D) (D) 1.7 (D)	(D) 3.6 (D) (D) 2.3 (D)	(D) 5.0 (D) (D) 2.9 (D)	(D) 8.3 (D) (D) 5.7 (D)	(D) .1 (D) (D) .1 (D)	(NA) CC .8 .5 .2 (NA)	(NA) (D) 17.5 8.5 3.1 (NA)

Note: For qualifications of data, see footnotes on table 1a.

¹Payroll and sales data for some small single-unit companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other Government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate the items shown for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown for those States where estimated value of shipments data based on administrative-record data account for 10 percent or more of figure shown: E1—10 to 19 percent; E2—20 to 29 percent; E3—30 to 39 percent; E4—40 to 49 percent; E5—50 to 59 percent; E6—60 to 69 percent; E7—70 to 79 percent; E8—80 to 89 percent; E9—90 percent or more.

\*Statistics for some producing States have been withheld to avoid disclosing data for individual companies. However, for States with 150 employees or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: AA—150 to 249 employees; BB—250 to 499 employees; CC—500 to 999 employees; EE—1,000 to 2,499 employees; FF—2,500 employees or more.

#### Table 3a. Summary Statistics for the Industry: 1987

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

					wear mills 2253)		
Item	Women's hosiery, except socks (SIC 2251)	Hosiery, n.e.c. (SIC 2252)	Total	Manufac- turers (SIC 2253-11)	Converters (SIC 2253-22)	Contractors (SIC 2253-33)	Knit underwear mills (SIC 2254)
Companiesnumber_	139	375	811	482	35	298	58
All establishments	161 68 43 50	426 150 172 104	824 384 319 121	494 254 139 101	34 22 11 1	296 108 169 19	63 19 19 25
Employment and labor costs:  Employees	29.3 452.7 385.9 66.9 37.4 29.5	36.5 541.5 467.8 73.6 41.3 32.4	59.0 986.0 838.4 147.6 82.7 64.9	45.7 777.4 661.9 115.5 64.7 50.8	1.2 29.8 24.8 4.9 2.5 2.5	12.0 178.8 151.7 27.1 15.5 11.6	19.3 332.4 275.7 56.7 24.9 31.8
Production workers:       1,000         Average for year       1,000         March       do.         May       do.         August       do.         November       do.	25.9 26.0 26.0 25.8 25.7	32.5 32.3 32.3 32.8 32.4	50.6 49.8 50.6 51.2 50.6	39.1 38.5 39.1 39.6 39.1	.8 .7 .8 .8	10.7 10.6 10.8 10.8 10.7	17.4 17.2 17.3 17.5 17.4
Hours millions do	53.7 13.3 13.7 13.2 13.6	59.6 14.6 15.2 15.1 14.8	96.9 23.5 24.6 24.4 24.3	75.1 18.2 19.1 18.9 18.9	1.5 .3 .4 .4 .4	20.3 5.0 5.1 5.1 5.0	33.1 8.0 8.3 8.0 8.7
Wagesmil dol_	321.1	372.0	619.1	487.0	10.3	121.9	231.3
Value added by manufacture do	769.5	960.1	1 677.8	1 367.7	74.3	235.8	516.5
Cost of materials¹         do_           Materials, parts, containers, etc., consumed²         do_           Resales         do_           Fuels         do_           Purchased electricity         do_           Contract work         do_	715.6 667.0 (D) 7.0 25.9 (D)	1 008.9 905.0 32.5 12.5 25.4 33.4	1 614.4 1 238.8 68.0 33.3 31.9 242.3	1 371.0 1 113.4 28.0 27.5 24.3 177.8	170.9 73.7 39.8 .4 1.0 56.0	72.5 51.8 .2 5.4 6.7 8.5	548.3 510.4 (D) 6.7 11.4 (D)
Quantity of electric energy used for heat and power: Purchased mil kWh_ Generated less sold do	480.3 (D)	497.6 (D)	578.3 (D)	469.6 (D)	13.5	95.2 -	213.6 -
Total value of shipments         mil dol.           Primary products         do.           Secondary products         do.           Miscellaneous receipts, total         do.           Value of resales         do.           Contract receipts         do.           Other miscellaneous receipts         do.	1 497.5 1 455.5 29.4 12.6 (D) 2.6 (D)	1 952.1 1 859.3 45.5 47.3 37.2 9.6 .5	3 255.2 2 940.5 184.0 130.6 82.3 6.5 41.9	2 703.6 2 450.4 174.1 79.1 35.2 2.2 41.7	243.5 191.2 5.3 46.9 46.9	308.1 298.9 4.6 4.6 .3 4.3	1 058.1 741.9 295.3 20.9 (D) 17.9 (D)
Inventories by stage of fabrication:  Beginning of 1987mil dol Finished goods	196.0 73.7 77.3 45.0	251.1 105.6 88.7 56.8	495.3 272.4 105.6 117.3	449.8 251.7 92.6 105.4	24.2 13.7 4.6 5.9	21.3 7.0 8.4 5.9	166.4 94.2 39.6 32.7
End of 1987         do           Finished goods         do           Work In process         do           Materials and supplies         do	182.1 58.9 79.7 43.6	273.3 113.1 98.1 62.1	545.8 297.9 117.1 130.8	496.3 277.2 102.3 116.9	27.0 13.9 6.1 7.0	22.5 6.9 8.8 6.9	174.2 105.0 35.5 33.7
Primary product specialization ratiopercent	98	98	94	(NA)	(NA)	(NA)	72 92

Coverage 1410	u	0	90	30	90	(144)	(14/7)	(147)	92
-			knit fabric mills 2257)	•	l		knit fabric mills 2258)	3	
ltem	Total	Manufac- turers (SIC 2257- 11)	Converters (SIC 2257- 22)	Contractors (SIC 2257- 33)	Total	Manufac- turers (SIC 2258- 11)	Converters (SIC 2258- 22)	Contractors (SIC 2258- 33)	Knitting mills, n.e.c. (SIC 2259)
Companiesnumber	305	223	13	75	212	154	-	59	78
All establishments       do-         With 1 to 19 employees       do-         With 20 to 99 employees       do-         With 100 employees or more       do-	334 124 115 95	251 96 82 73	8 5 2 1	75 23 31 21	241 82 102 57	189 67 72 50	=	52 15 30 7	79 44 26 9
Employment and labor costs:  Employees	34.9 693.4 577.7 115.6	29.0 573.1 477.6 95.5	.3 7.4 6.1 1.2	5.6 112.9 94.0 18.9	20.5 461.2 388.2 73.0	17.4 394.8 332.6 62.2 31.8		3.1 66.4 55.7 10.8 5.9	3.8 66.8 54.7 12.0 6.0
Employer payments and other programs do	62.0	51.6	.6	9.8	35.3	30.4	-	4.8	6.0
Production workers:         1,000_           Average for year         1,000_           March         do_           May         do_           August         do_           November         do_	29.2 28.3 29.2 29.7 29.6	24.4 23.6 24.3 24.8 24.9	.1 .1 .1 .1	4.7 4.6 4.8 4.8 4.6	16.8 16.5 16.8 16.8 17.1	14.2 14.0 14.1 14.1 14.3	-	2.7 2.6 2.6 2.7 2.8	3.2 3.1 3.1 3.3 3.2

#### Table 3a. Summary Statistics for the Industry: 1987-Con.

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

		Weft (circular) I (SIC 2			L	ace and warp (SIC 2		3	
Item	Total	Manufac- turers (SIC 2257- 11)	Converters (SIC 2257- 22)	Contractors (SIC 2257- 33)	Total	Manufac- turers (SIC 2258- 11)	Converters (SIC 2258- 22)	Contractors (SIC 2258- 33)	Knitting mills, n.e.c. (SIC 2259)
Production workers—Con.									
Hours millions	57.3	47.3	<u>.1</u>	9.9	35.5	29.9	-	5.6	5.8
January to March do	14.1	11.7	(Z) (Z) (Z)	2.4	8.7	7.4	-	1.3	1.4
April to June do	14.6	12.0	(Z)	2.6	9.0	7.6	-	1.4	1.5
July to September do	14.3	11.8	(Z)	2.5	8.8	7.4	-	1.4	1.5
October to December do	14.4	11.9	(Z)	2.4	9.0	7.6	-	1.4	1.4
Wagesmil dol	424.6	354.3	.7	69.6	286.6	244.2	-	42.4	38.3
Value added by manufacture do	1 425.6	1 226.3	27.2	172.2	812.5	710.9	-	101.5	97.9
Cost of materials <sup>1</sup> do	2 183.0	1 999.1	79.0	104.9	1 181.1	1 132.4	_	48.6	93.1
Materials, parts, containers, etc., consumed <sup>2</sup> do	1 971.9	1 840.4	51.3	80.2	1 093.2	1 058.1	_	35.1	79.3
Resales do	3.5	2.6	.5	.3	1.0	1.0	_		8.0
Fuelsdo	47.3	36.5	.1	10.7	24.3	17.9	_	(Z) 6.4	.8
Purchased electricity do	56.3	46.9	.9	8.4	32.0	25.7	_	6.3	2.0
Contract work do	104.1	72.6	26.1	5.4	30.5	29.7	-	.8	3.0
Quantity of electric energy used for heat and power:									
Purchased mil kWh	1 054.3	880.0	9.0	165.4	583.8	484.2	_	99.6	28.7
Generated less sold do	(D)	(D)	-	-	(D)	(D)	ζ-	(D)	
Total value of shipmentsmil dol	3 578.5	3 193.6	107.0	277.9	1 992.3	1 840.8	_	151.6	187.6
Primary products do	3 355.9	3 003.9	105.9	246.2	1 934.1	1 789.8	_	144.3	174.8
Secondary products do	207.3	182.0	.2	25.0	53.9	48.3	-	5.6	2.8
Miscellaneous receipts, total do	15.2	7.7	.9	6.7	4.3	2.7	-	1.7	10.0
Value of resales do	4.5	3.2	.9	.4	2.3	2.2	_	(Z)	9.6
Contract receipts do	(D)	.8	_	3.4	1.4		_	1.4	(D)
Other miscellaneous receipts do	l (Dí	3.6	-	2.8	.6	.4	_	.2	(D) (D)
•	, , ,								(-,
Inventories by stage of fabrication:									
Beginning of 1987mil dol	248.7	226.3	10.6	11.9	230.9	223.0	_	7.9	33.3
Finished goods do	90.0	82.0	5.3	2.7	66.1	63.6	_	2.4	19.1
Work in process do	75.7	69.8	3.2	2.8	82,3	79.6	-	2.7	3.8
Materials and supplies do	82.9	74.4	2.1	6.4	82.5	79.8	-	2.8	10.3
End of 1987 do	295.8	273.2	10.1	12.5	220,9	213.1	_	7.8	36.7
Finished goodsdo	100.9	94.9	3.9	2.2	64.5	62.5	-	2.0	22.5
Work in process do	95.0	88.7	3.8	2.5	85.0	83.2	_	1.8	3.8
Materials and supplies do	99.8	89.6	2.4	7.8	71.3	67.3	-	4.0	10.3
Primary product specialization ratiopercent_	94	(NA)	(NA)	(NA)	97	(NA)	(NA)	(NA)	98
Coverage ratio do	95	(NA)	(NA)	(NA)	92	(NA)	(NA)	(NA)	79

Note: For qualifications of data, see footnotes on table 1a.

<sup>&</sup>lt;sup>1</sup>Data on purchased services for the repair of buildings and machinery and for communication services are not included in cost of materials, etc., but are shown in table 3c. <sup>2</sup>Data on materials consumed by type are shown in table 7. Data on amount purchased or transferred from foreign sources are shown in table 3c.

### Table 3b. Gross Book Value of Depreciable Assets, Capital Expenditures, Retirements, Depreciation, and Rental Payments: 1987

[Million dollars. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	Women's hosiery, except socks (SIC 2251)	Hosiery, n.e.c. (SIC 2252)	Knit outerwear mills (SIC 2253)	Knit underwear mills (SIC 2254)	Weft (Circular) knit fabric mills (SIC 2257)	Lace and warp knit fabric mills (SIC 2258)	Knitting mills, n.e.c. (SIC 2259)
Gross book value of depreciable assets: Total: Beginning of year	384.8	434.1	742.2	230.1	945.8	726.5	42.8
	32.3	64.6	94.0	27.7	95.8	67.3	6.6
New capital expenditures¹ Used capital expenditures Retirements End of year Buildings and other structures:	1.8	4.9	6.6	1.0	8.7	2.6	.8
	31.2	12.0	28.7	5.6	62.0	27.8	2.3
	387.6	491.6	814.0	253.2	988.3	768.6	47.9
Beginning of year New capital expenditures Used capital expenditures Retirements	113.1 1.8 .2 4.8	124.3 14.7 .6 1.4	229.9 11.3 1.7 3.0	76.1 5.2 .5 .6	232.5 13.3 5.7 8.8	137.9 10.3 .4 3.7	8.8 1.4 .1
End of year	271.8 30.5 1.5	138.2 309.8 49.9 4.2	239.9 512.3 82.7 4.9	81.3 154.0 22.4	242.8 713.2 82.4 3.0	144.9 588.6 57.0 2.2	10.0 34.0 5.1
Retirements End of year  Depreciation charges during 1987:	26.3	10.5	25.7	5.0	53.2	24.1	1.9
	277.3	353.3	574.1	171.9	745.5	623.7	38.0
Total	31.0	37.2	56.1	14.6	69.4	61.5	4.1
	4.3	5.6	9.0	3.5	8.9	8.1	.5
	26.7	31.6	47.0	11.1	60.5	53.4	3.5
Rental payments: Total	26.3	8.5	32.1	3.4	14.3	14.9	1.6
	13.0	4.5	18.3	.8	6.1	7.1	.6
	13.2	4.0	13.8	2.6	8.3	7.8	1.0

Note: Retirements and depreciation data for establishments not included in the ASM sample were extrapolated from the historical ratio of retirements or depreciation to assets. These ratios were developed at the industry level.

#### Table 3c. Supplemental Industry Statistics Based on Sample Estimates: 1987

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Pror meaning or appreviations and symbols, see introductory text. For explanation of	Women's ho	siery, except		siery, n.e.c. SIC 2252)		Knit outerv (SIC 2			lerwear mills C 2254)
ltem	Amount (million dollars)	Relative standard error of estimate <sup>1</sup> (percent)		unt err	ative idard for of nate <sup>1</sup> cent)	Amount (million dollars)	Relative standard error of estimate <sup>1</sup> (percent)	Amour (millio dollars	n estimate1
Purchased services: Cost of purchased services for the repair of— Buildings and other structures Response coverage ratio (percent) <sup>2</sup> Machinery Response coverage ratio (percent) <sup>2</sup> Cost of purchased communication services Response coverage ratio (percent) <sup>2</sup>	1.1 72.8 9.3 77.9 1.3 42.5	(X) (X) (X) (X) (X) (X)	6	2.3 7.4 7.2 6.9 1.9 3.0	888888	(S) (S) (S) (S) (S) (S)	\$\$ \$\$ \$\$ \$\$	1. 71. 5. 74.	7 (X) (X) (X) (X) (X) (X) (X)
New machinery and equipment expenditures	30.5 .1 1.7 28.6 1.2	(X) 44 6 1 (X)	4	9.9 .7 1.7 7.4 1.2	(X) 12 9 1 (X)	82.7 .5 1.7 80.5 1.5	(X) 20 10 1 (X)	22. 21. 1.	6 4
Cost of materials, components, parts, etc., used	667.0 667.0 1.4	(X) 1 1 (X)	90	3.5	(X) 55 1 (X)	1 238.8 9.4 1 229.4 1.8	(X) 80 1 (X)	510. 3. 507. 1.	76
		ular) knit fabri SIC 2257)	c mills		knit fa (SIC 2	abric mills 258)		Knitting mill (SIC 22	
ltem	Amo (mi doll	llion	Relative standard error of estimate <sup>1</sup> (percent)	(m	ount illion lars)	Relati standa error estimat (perce	of te <sup>1</sup>	Amount (million dollars)	Relative standard error of estimate <sup>1</sup> (percent)
Purchased services:  Cost of purchased services for the repair of— Buildings and other structures— Response coverage ratio (percent)²— Machinery————————————————————————————————————	2	8.7 58.2 20.0 59.3 2.9 61.9	888888		3.5 50.5 9.1 63.4 2.3 66.2		XXXXXX	(3) (3) (3) (3) (3) (3) (3) (3) (3) (3)	(X) (X) (X) (X) (X)
New machinery and equipment expenditures  Automobiles, trucks, etc.  Computers and peripheral  All other  Adjustment ratio <sup>3</sup>	,	32.4 1.5 3.0 77.9 1.4	(X) 43 5 1 (X)		57.0 .9 1.6 54.5 1.4		(X) 25 5 1 (X)	5.1 (Z) .1 5.0 1.2	(X) 1 1 1 (X)

<sup>&</sup>lt;sup>1</sup>Data on new machinery and equipment expenditures by type are provided in table 3c.

#### Table 3c. Supplemental Industry Statistics Based on Sample Estimates: 1987—Con.

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

	Weft (circular) (SIC	knit fabric mills 2257)	Warp knit (SIC	fabric mills 2258)	Knitting r (SIC	nills, n.e.c. 2259)
Item	Amount (million dollars)	Relative standard error of estimate <sup>1</sup> (percent)	Amount (million dollars)	Relative standard error of estimate <sup>1</sup> (percent)	Amount (million dollars)	Relative standard error of estimate <sup>1</sup> (percent)
Cost of materials, components, parts, etc., used	1 971.9 26.5 1 945.4 1.4	(X) 17 1 (X)	1 093.2 22.2 1 071.0 1.8	(X) 5 1 (X)	(S) (S) (S) (S)	(X) (S) (S) (S) (X)

#### Industry Statistics by Employment Size of Establishment: 1987

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

		All	All employees		Production workers			Value added by			New capital	End-of- year
Industry and employment size class	E¹	estab- lish- ments (no.)	Number (1,000)	Payroll (million dollars)	Number (1,000)	Hours (millions)	Wages (million dollars)	manufac- ture (million dollars)	Cost of materials (million dollars)	Value of shipments (million dollars)	expend- itures (million dollars)	inven- tories (million dollars)
INDUSTRY 2251, WOMEN'S HOSIERY, EXCEPT SOCKS												
Total		161	29.3	38 <b>5.</b> 9	<b>25.</b> 9	53.7	321.1	769.5	715.6	1 497.5	32.3	182.1
Establishments with an average of—  1 to 4 employees	E9 E8 E5 E2	33 14 21 27 16 17 13 13	.1 .3 .8 1.1 2.8 4.5 9.8 9.8	1.1 .9 4.0 9.3 13.2 33.2 50.9 137.0 136.3	.1 .3 .6 .9 2.6 4.1 8.5 8.8	.1 .5 1.1 1.8 4.6 7.7 19.8 17.9	.8 .7 2.9 6.4 9.2 26.6 41.0 116.7	2.6 2.0 8.6 19.2 28.7 62.5 93.8 300.6 251.5	2.1 1.7 7.9 17.1 35.7 90.8 92.5 205.1 262.7	4.8 3.7 16.5 36.7 66.1 153.6 185.4 508.7 522.0	.1 .4 .6 .8 2.5 -4.4 13.4	.5 .4 1.8 3.5 5.5 18.7 25.2 52.9 73.5
Covered by administrative records <sup>2</sup>	. E9	66	.8	8.2	.7	1.2	6.1	18.6	15.1	33.7	.6	3.8
INDUSTRY 2252, HOSIERY, N.E.C.												
Total		426	36.5	467.8	3 <b>2.5</b>	<b>59.</b> 6	372.0	960.1	1 008.9	1 952.1	64.6	<b>27</b> 3.3
Establishments with an average of—  1 to 4 employees  5 to 9 employees  10 to 19 employees  20 to 49 employees  100 to 249 employees  250 to 499 employees  500 to 999 employees  500 to 999 employees  1,000 to 2,499 employees	E8 E8 E2 E1	55 39 56 107 65 65 33 5	.1 .3 .8 3.4 4.6 11.1 11.6 4.6 (D)	1.4 2.6 8.4 37.6 55.2 143.8 153.6 65.4 (D)	.1 .2 .7 2.9 4.1 9.8 10.4 <u>4.2</u> (D)	.2 .3 1.2 5.2 7.5 18.1 19.2 7.9 (D)	1.1 1.9 6.3 28.5 44.2 111.3 124.8 53.9 (D)	2.6 5.7 15.7 67.2 114.8 292.5 353.6 108.1 (D)	3.0 6.6 18.9 85.5 142.8 311.6 357.7 82.8 (D)	5.6 12.4 34.5 153.1 256.7 596.8 710.0 183.0 (D)	.1 .5 2.5 4.2 18.3 22.5 16.5 (D)	.7 1.6 4.4 15.9 27.4 87.7 102.6 32.9 (D)
Covered by administrative records <sup>2</sup>	E9	167	1.9	16.8	1.7	2.7	13.0	31.2	36.7	67.9	.7	8.8
INDUSTRY 2253, KNIT OUTERWEAR MILLS												
Total	. E1	824	59.0	838.4	50.6	96.9	619.1	1 677.8	1 614.4	3 <b>255.2</b>	94.0	<b>545.</b> 8
Establishments with an average of—  1 to 4 employees	E7 E4 E4 E2 E1	164 71 149 197 122 74 28 14 3	.3 .5 2.1 6.4 8.4 11.4 9.3 9.6 10.9 (D)	5.9 8.8 31.5 82.5 113.8 147.5 125.7 147.8 174.9 (D)	.3 .4 1.7 5.8 7.3 10.1 7.7 8.0 <u>9.6</u>	.6 .8 3.2 10.1 13.6 18.7 14.4 16.6 18.9 (D)	4.1 6.5 22.5 62.2 84.6 110.5 90.3 104.0 134.5 (D)	14.5 18.6 65.3 142.6 211.1 295.9 241.7 379.0 (D)	14.7 16.5 71.3 115.7 214.7 224.9 277.6 305.5 373.4 (D)	29.3 35.2 136.8 258.6 427.2 521.9 516.5 668.5 661.2 (D)	.6 .6 3.5 5.3 12.9 14.1 15.5 9.9 31.6 (D)	4.8 5.0 19.4 33.3 46.4 68.4 84.7 140.8 142.9 (D)
Covered by administrative records <sup>2</sup>	.   E9	300	2.4	27.1	2.0	3.4	19.7	50.6	47.9	98.4	1.9	15.5

¹For description of relative standard error of estimate, see Qualifications of the Data in appendixes.
²Measure of extent to which respondents reported each item. Derived for each item by calculating the ratio of weighted employment for those sample establishments that reported the specific inquiry to total employment for all establishments classified in industry. (See appendixes for explanation of sample weight.)
³Detail has been adjusted upwards to account for nonresponse. Inverse of the ratio shown represents a measure of the response to the inquiry. (See appendixes for further explanation.)
⁴Data may understate the true cost of imported parts, components, and supplies since some respondents do not know the origin of these materials. Includes cases where materials were purchased from secondary suppliers or where they were transferred from company-operated warehouses or other distribution points. Direct purchases from foreign suppliers and importers by domestic manufacturing establishments are believed to be reported accurately.

#### Table 4. Industry Statistics by Employment Size of Establishment: 1987-Con.

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

[For meaning of abbreviations and symbols, see in				oloyees		duction wor	kers	Value			New	End-of-
Industry and employment size class	E1	All estab- lish- ments (no.)	Number (1,000)	Payroll (million dollars)	Number (1,000)	Hours (millions)	Wages (million dollars)	added by manufac- ture (million dollars)	Cost of materials (million dollars)	Value of shipments (million dollars)	expend- itures (million dollars)	year inven- tories (million dollars)
INDUSTRY 2254, KNIT UNDERWEAR MILLS												
Total	-	63	19.3	275.7	17.4	33.1	231.3	516.5	<b>548.</b> 3	1 058.1	27.7	174.2
Establishments with an average of—  1 to 4 employees	E9 E9 E4 E3	8 6 5 13 6 7 7 5 5	(Z) (Z) .1 .5 .4 1.0 2.8 3.3 11.2 (D)	.3 .6 .9 5.3 4.7 13.9 36.4 42.3 171.3	(Z) (Z) .1 .4 .9 2.5 2.7 10.4 (D)	(Z) .1 .1 .7 .7 1.7 4.4 5.3 20.1 (D)	.2 .5 .7 3.8 3.8 10.6 28.0 31.8 151.9 (D)	.5 1.1 2.0 7.8 9.6 31.7 78.9 84.6 300.3	.6 1.3 2.9 6.2 4.4 27.6 58.4 98.9 347.9	1.2 2.4 4.7 14.2 13.8 58.1 135.8 178.6 649.4 (D)	(Z) (Z) .1 .3 .1 .8 2.7 10.1 13.5	.2 .4 1.6 3.5 1.6 11.2 21.7 32.5 101.5 (D)
Covered by administrative records <sup>2</sup>	. E9	19	.2	1.8	.2	.2	1.4	3.2	3.8	7.0	.1	1.1
INDUSTRY 2257, WEFT (CIRCULAR) KNIT FABRIC MILLS												
Total	-	334	34.9	577.7	29.2	57.3	424.6	1 425.6	2 183.0	3 578.5	95.8	295.8
Establishments with an average of—  1 to 4 employees	E3	38 35 51 68 47 64 21 7 2	.1 .2 .7 2.2 3.3 10.3 7.3 10.8 (D)	1.8 4.1 14.0 34.9 56.5 167.3 120.7 178.4 (D)	.1 .2 .5 1.7 2.7 8.5 6.1 9.4 (D)	.1 .4 1.1 3.4 5.5 17.1 12.8 16.9 (D)	1.2 3.0 8.3 22.7 39.3 121.1 90.7 138.2 (D)	5.2 9.0 41.6 87.1 117.4 362.8 290.6 512.0 (D)	9.4 13.1 75.3 164.1 167.2 655.7 449.3 <u>648.8</u> (D)	13.9 22.1 115.6 252.8 284.0 1 012.2 729.8 1 148.0 (D)	.2 .4 1.9 4.1 5.3 31.1 26.6 26.2 (D)	1.7 1.5 11.2 20.1 28.7 77.5 52.0 103.2 (D)
Covered by administrative records <sup>2</sup>	. E9	99	.8	11.9	.7	1.3	8.6	25.7	40.3	66.0	1.4	5.0
INDUSTRY 2258, LACE AND WARP KNIT FABRIC MILLS												
Total	-	241	2 <b>0.</b> 5	388.2	16.8	35.5	286.6	812.5	1 181.1	1 992.3	67.3	<b>220</b> .9
Establishments with an average of—  1 to 4 employees	E9 E6 E2 E2	24 23 35 56 46 36 15	.1 .2 .5 1.8 3.3 5.3 5.2 4.2	1.3 2.8 10.0 33.1 57.3 94.3 107.8 81.8	(Z) .1 .4 1.5 2.7 4.4 4.1 3.5	.1 .3 .9 3.2 5.5 8.8 8.9 7.9	.8 2.1 7.1 24.0 41.3 68.9 77.7 64.8	1.9 4.7 16.7 70.0 109.5 224.0 237.2 148.5	3.5 8.2 24.0 95.3 142.9 277.6 357.2 272.4	5.4 12.9 40.4 166.7 252.1 502.7 581.2 431.0	.1 .3 1.4 5.0 9.5 10.2 19.9 20.9	.7 1.7 5.4 17.2 30.4 49.8 57.9 57.8
Covered by administrative records <sup>2</sup>	. E9	56	.4	6.5	.3	.7	4.5	10.6	21.3	31.9	.8	4.3
INDUSTRY 2259, KNITTING MILLS, N.E.C											:	
Total	. E1	<b>7</b> 9	3.8	54.7	3.2	5.8	38.3	97.9	93.1	187.6	6.6	36.7
Establishments with an average of—  1 to 4 employees	E9 E6 E5 E3	28 5 11 15 11 6 2	.1 (Z) .1 .4 .8 <u>2.4</u> (D) (D)	.8 .3 1.5 5.7 8.3 <u>38.1</u> (D)	.1 (Z) .1 .4 .7 <u>1.8</u> (D) (D)	.1 (Z) .2 .7 1.2 3.5 (D) (D)	.6 .2 1.2 4.0 6.5 <u>25.9</u> (D) (D)	1.4 .6 3.4 10.3 11.8 <u>70.3</u> (D)	1.4 .6 2.7 15.8 10.7 61.9 (D)	2.9 1.1 6.1 26.0 22.8 128.7 (D)	(Z) (Z) .1 .3 .2 <u>5.9</u> (D) (D)	.4 .1 .8 3.5 2.4 <u>29.5</u> (D)
Covered by administrative records <sup>2</sup>	. E9	33	.1	1.3	.1	.2	1.0	2.4	2.5	4.9	.1	.6

Note: For qualifications of data, see footnotes on table 1a. Data shown as a (D) are included in underscored figures above.

Payroll and sales data for some small single unit companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other Government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate the items shown for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown for those employment-size classes where estimated data based on administrative-record data account for 10 percent or more of figures shown: E1—10 to 19 percent; E2—20 to 29 percent; E3—30 to 39 percent; E4—40 to 49 percent; E5—50 to 59 percent; E6—60 to 69 percent; E7—70 to 79 percent; E8—80 to 89 percent; E9—90 percent or more.

2Report forms were not mailed to small single unit companies with up to 20 employees (cutoff varied by industry). Payroll and sales data for 1987 were obtained from administrative records supplied by other agencies of the Federal Government. Those data were then used in conjunction with industry averages to estimate the items shown. Data are also included in respective employment-size classes shown.

#### Table 5a. Industry Statistics by Industry and Primary Product Class Specialization: 1987

[Table presents selected statistics for establishments according to their degree of specialization in products primary to their industry. Measures of plant specialization shown are (1) industry specialization: ratio of primary product shipments to total product shipments (primary plus secondary, excluding miscellaneous receipts) for the establishment; and (2) product class specialization: ratio of largest primary product class shipments to total product shipments (primary plus secondary, excluding miscellaneous receipts) for the establishment. See appendix for method of computing ratios. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Indus- try or prod- uct class code	Industry or primary product class	All	All empl	loyees	Pro	duction worke	ers	Value added by	Cost of materials (million dollars)	Value of shipments (million dollars)	New capital expenditures (million dollars)
		estab- lish- ments (number)	Number (1,000)	Payroll (million dollars)	Number (1,000)	Hours (millions)	Wages (million dollars)	manufac- ture (million dollars)			
2251	Women's hoslery, except socks: All establishments in industry	161	29.3	385.9	25.9	53.7	321.1	769.5	715.6	1 497.5	32.3
22514	Establishments with this product class primary: Women's finished hosiery, full-length and knee-	13		20.0		0.4	19.9	20.4	40.0	74.0	0.4
22516 22518	length	54	2.0 24.9	22.6 335.7	1.8 21.9	3.4 46.2	279.9	29.1 682.0	40.9 606.6	71.2 1 298.1	2.1 28.7
2252	greige	16	1.4	17.3	1.3	2.6	13.8	35.2	49.9	87.1	.8
2202	All establishments in industry  Establishments with this product class primary:	426	36.5	467.8	32.5	59.6	372.0	960.1	1 008.9	1 952.1	64.6
22522 22525 22526	Men's finished hosiery (sizes 10 and larger)	86 85	15.0 13.7	195.8 179.8	13.5 12.2	24.7 23.0	156.7 142.5	389.0 410.5	428.5 373.8	814.6 771.7	28.6 25.3
	Hosiery shipped in the greige (except women's full- length and pantyhose)	56	4.3	56.6	3.8	6.9	45.5	97.1	139.2	235.4	9.3
2253	Knit outerwear mills: All establishments in industry	824	59.0	838.4	50.6	96.9	619.1	1 677.8	1 614.4	3 255.2	94.0
22534 22535 22536 2253A 2253B	Establishments with this product class primary:  Men's and boys' sweaters  Women's, misses', and juniors' sweaters  Girls', children's, and infants' sweaters  Men's and boys' knit shirts  Women's, misses', and juniors' knit shirts and	38 57 13 21	7.8 5.8 (D) 5.7	114.1 92.0 (D) 89.6	6.7 5.0 (D) 4.8	12.7 9.6 (D) 9.3	85.0 63.8 (D) 61.5	261.6 185.1 (D) 166.0	270.5 240.4 (D) 216.7	526.6 428.1 (D) 381.0	13.6 9.2 (D) 15.7
2253C 2253D 2253E	blouses Girls', children's, and infants' knit shirts and blouses All other knit outerwear products Contract and commission receipts	12 2 42 293	3.0 (D) 17.1 11.8	34.3 (D) 259.0 150.3	2.5 (D) 14.3 10.6	5.2 (D) 28.3 20.0	23.3 (D) 193.6 120.4	86.9 (D) 556.8 236.9	85.4 (D) 514.0 80.2	170.9 (D) 1 039.5 317.2	2.6 (D) 35.3 8.9
2254	Knit underwear mills: All establishments in industry	63	19.3	275.7	17.4	33.1	231.3	516.5	548.3	1 058.1	27.7
22541 22542 22543	Establishments with this product class primary: Men's and boys' knit underwear and nightwear Women's and children's knit underwear Women's and children's knit nightwear	18 14 3	14.3 (D) (D)	213.1 (D) (D)	13.2 (D) (D)	25.2 (D) (D)	184.7 (D) (D)	413.0 (D) (D)	454.5 (D) (D)	858.4 (D) (D)	23.8 (D) (D)
2257	Weft (circular) knit fabric milis: All establishments in industry	334	↑ 34.9	577.7	29.2	57.3	424.6	1 425.6	2 183.0	3 578.5	95.8
22571 22573 22579	Establishments with this product class primary: Weft knit fabrics greige goods, except hosiery Finished weft knit fabrics (except hosiery) Contract and commission receipts	49 77 70	6.1 20.0 5.8	102.0 333.5 98.1	5.2 16.7 4.9	10.1 32.3 10.3	77.0 242.8 72.6	238.9 917.8 182.1	574.2 1 364.2 108.7	798.6 2 265.6 291.3	17.6 58.6 15.0
2258	Lace and warp knlt fabric mills: All establishments in industry	241	20.5	388.2	16.8	35.5	286.6	812.5	1 181.1	1 992.3	67.3
22581 22584 22585 22589	Establishments with this product class primary: Warp knit fabrics greige goods Finished warp knit fabrics Lace and net goods Contract and commission receipts	50 48 28 48	3.4 11.3 1.6 3.3	61.3 223.6 29.9 60.8	2.9 9.1 1.3 2.9	5.9 19.6 2.6 6.0	45.9 163.6 21.9 46.1	136.1 486.1 58.4 110.9	228.6 797.7 54.8 56.1	563.8 1 282.5 112.8 168.3	10.6 43.4 1.8 10.3
2259	Knitting mills, n.e.c.: All establishments in industry	79	3.8	54.7	3.2	5.8	38.3	97.9	93.1	187.6	6.6

Note: For qualifications of data, see footnotes on table 1a.

# Table 5b. Industry-Product Analysis—Value of Shipments and Primary Product Shipments and Specialization and Coverage Ratios for the Industry: 1987 and Earlier Census Years

[An establishment is assigned to an industry based on shipment values of products representing largest amount considered primary to an industry. Frequently, establishment shipments comprise mixtures of products assigned to an industry (primary), those considered primary to other industries (secondary), and receipts for activities such as merchandising or contract work. Columns A-D show this product pattern for an industry, and column E shows primary product specialization ratio. The extent to which an industry's primary products are shipped by establishments classified in and out of an industry is shown in columns F-H and coverage ratio is shown in column I. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

			Value of primary product shipments							
Industry and product group code	Industry and census year	Total (million dollars)	Primary products (million dollars)	products (million	Miscel- laneous receipts (million dollars)	Primary product special- ization ratio col. B÷ col. B+C (percent)	Total made in all indus- tries (million dollars)	Made in this industry (million	Made in other indus- tries (million dollars)	Coverage ratio col. B÷ col. F (percent)
		А	В	С	D	Е	F	G	н	1
2251	Women's hosiery, except socks	1 497.5 1 411.3 871.2	1 455.5 1 296.2 775.2	29.4 69.6 72.9	12.6 45.5 23.1	98 95 91	1 514.5 1 425.3 819.1	1 455.5 1 296.2 775.2	58.9 129.1 43.9	96 91 95

## Table 5b. Industry-Product Analysis—Value of Shipments and Primary Product Shipments and Specialization and Coverage Ratios for the Industry: 1987 and Earlier Census Years—Con.

[An establishment is assigned to an industry based on shipment values of products representing largest amount considered primary to an industry. Frequently, establishment shipments comprise mixtures of products assigned to an industry (primary), those considered primary to other industries (secondary), and receipts for activities such as merchandising or contract work. Columns A-D show this product pattern for an industry, and column E shows primary product specialization ratio. The extent to which an industry's primary products are shipped by establishments classified in and out of an industry is shown in columns F-H and coverage ratio is shown in column I. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

			Valu	ue of shipme	nts		Value of primary product shipments			
Industry and product group code	Industry and census year	Total (million dollars)	Primary products (million dollars)	Secondary products (million dollars)	Miscel- laneous receipts (million dollars)	Primary product special- ization ratio col. B÷ col. B+C (percent)	Total made in all indus- tries (million dollars)	Made in this industry (million dollars)	Made in other indus- tries (million dollars)	Coverage ratio col. B÷ col. F (percent)
		А	В	С	D	E	F	G	Н	1
2252	Hosiery, n.e.c. 1987. 1982. 1977.	1 952.1 1 443.4 921.3	1 859.3 1 258.7 858.3	45.5 109.3 31.8	47.3 75.4 31.1	98 92 96	1 902.4 1 324.5 893.6	1 859.3 1 258.7 858.3	43.2 65.9 35.3	98 95 96
2253	Knit outerwear mills	3 255.2 3 182.4 2 335.9	2 940.5 2 972.6 2 035.5	184.0 162.8 223.4	130.6 47.0 77.1	94 95 90	3 283.8 3 154.2 2 136.6	2 940.5 2 972.6 2 035.5	343.2 181.6 101.1	90 94 95
2254	Knit underwear mills	1 058.1 829.9 648.9	741.9 714.6 497.0	295.3 101.7 127.0	20.9 13.7 25.0	72 88 80	803.2 767.4 579.5	741.9 714.6 497.0	61.3 52.8 82.5	92 93 86
2257	Weft (circular) knit fabric mills1987 1982 1977	3 578.5 2 538.8 3 169.4	3 355.9 2 323.6 2 730.8	207.3 202.8 317.4	15.2 12.4 121.2	94 92 90	3 539.2 2 494.9 3 111.2	3 355.9 2 323.6 2 730.8	183.2 171.3 380.4	95 93 88
2258	Lace and warp knit fabric mills 1987 1982 1977	1 992.3 1 538.0 1 453.1	1 934.1 (NA) (NA)	53.9 (NA) (NA)	4.3 (NA) (NA)	97 (NA) (NA)	2 106.9 (NA) (NA)	1 934.1 (NA) (NA)	172.8 (NA) (NA)	92 (NA) (NA)
2259	Knitting mills, n.e.c. 1987 1982 1977	187.6 114.5 95.7	174.8 108.5 91.3	2.8 3.3 2.4	10.0 2.7 2.6	98 97 97	222.4 133.5 112.9	174.8 108.5 91.3	47.6 25.0 21.6	79 81 81

## Table 6a-1. Product and Product Classes—Quantity and Value of Shipments by All Producers: 1987 and 1982

[Includes quantity and value of products of this industry produced by (1) establishments classified in this industry (primary) and (2) establishments classified in other industries (secondary). Transfers of products of this industry from one establishment of a company to another establishment of the same company (interplant transfers) are also included. For further explanation, see Value of Shipments in appendixes. For comparability of product classes and product codes between 1982 and 1987, see appendixes. For meaning of abbreviations and symbols, see introductory text]

			1987		1982		
1987		Number of	Product st	nipments1	Number of	Product si	hipments <sup>1</sup>
product code	Product	companies with shipments of \$100,000 or more	Quantity <sup>2</sup>	Value (million dollars)	companies with shipments of \$100,000 or more	Quantity <sup>2</sup>	Value (million dollars)
2251	WOMEN'S HOSIERY, EXCEPT SOCKS <sup>3</sup>						
	Total	(NA)	(X)	1 514.5	(NA)	(X)	1 312.8
22514 — 22514 17	Women's finished hosiery, full-length and knee-lenght <sup>3</sup> Seamless stockings, full-length and knee-length: Knee-length, stretch and norstretchmil doz	(NA)	(X)	235.5	(NA)	(X)	240.9
	Full-length, nonfancy:	23	32.2	175.4	39	31.3	141.6
22514 21 22514 37 22514 39	Less than 30 denier, stretch and nonstretch	15 5	6.6 .5	38.8 4.3	21 10	7.9 .5	56.9 6.5
22514 39	All other full-length, nonfancy, including 30 denier or heavier, but excluding support do heavier, but excluding support do heavier, and do heavier, and lengths and denier; and other full-length stockings, including fancy stockings 370-needle and finer and stockings knit on less than 370-needle and finer and stockings knit on less than 370-needle and finer and stockings knit on less than 370-needle and finer and stockings knit on less than 370-needle and finer and stockings knit on less than 370-needle and finer and stockings knit on less than 370-needle and finer and stockings knit on less than 370-needle and finer and stockings knit on less than 370-needle and finer and stockings knit on the stocking knit of the	3	.2	1.1	(NA)	(NA)	8.1
22514 00	needle and finer and stockings knit on less than 370- needle do	2	(D)	(D)	7	1.7	27.8
	n.s.k	(NA)	(X)	(D)	-	(X)	-
22516 22516 12	Women's finished pantyhose mil doz	(NA)	(X)	1 132.8	(NA)	(X)	943.2
22516 14	pairs 30 denier or heavier, opaque stretchdo Elastomer:	48 26	*61.8 11.8	543.8 118.8	41 26	41.7 14.5	313.4 208.9
22516 16	Control top, no leg support mil doz pairs	20	16.4	185.2	26	17.6	187.6
22516 18 22516 19	Leg support with or without control topdo Other miscellaneous sheers, including fancies, sewed on legs, waist connected legs, replacable legs, nonstretch,	20	17.6	217.8	24	12.1	216.7
22516 00	etc., and waist-highs knit on less than 370-needle do Women's finished pantyhose, n.s.k	8 -	4.7 (X)	67.3	6 (NA)	1.2 (X)	13.7 2.9

## Table 6a-1. Product and Product Classes—Quantity and Value of Shipments by All Producers: 1987 and 1982—Con.

[Includes quantity and value of products of this industry produced by (1) establishments classified in this industry (primary) and (2) establishments classified in other industries (secondary). Transfers of products of this industry from one establishment of a company to another establishment of the same company (interplant transfers) are also included. For further explanation, see Value of Shipments in appendixes. For comparability of product classes and product codes between 1982 and 1987, see appendixes. For meaning of abbreviations and symbols, see introductory text]

			1987		1982		
1987		Number of	Product ships	ments1	Number of	Product ship	ments <sup>1</sup>
product code	Product	companies with shipments of \$100,000 or more	Quantity <sup>2</sup>	Value (million dollars)	companies with shipments of \$100,000 or more	Quantity <sup>2</sup>	Value (million dollars)
2251	WOMEN'S HOSIERY, EXCEPT SOCKS3—Con.						
22518 — 22518 14	Women's hosiery and pantyhose shipped in the greige <sup>3</sup>	(NA)	(X)	106.8	(NA)	(X)	85.6
22518 17 22518 00	Panryhose shipped in the greige	11 18 -	18.3 14.2 (X)	32.2 74.6 -	18 21 (NA)	10.9 11.7 (X)	27.5 57.7 .4
22510 — 22510 00	Women's hosiery, except socks, n.s.k	(NA)	(X)	39.4	(NA)	(X)	43.1
22510 00	establishments with 20 employees or more (see note)  Women's hosiery, except socks, n.s.k., typically for	(NA)	(X)	5.1	(NA)	(X)	26.4
22310 02	establishments with less than 20 employees (see note)	(NA)	(X)	34.3	(NA)	(X)	16.7
2252	HOSIERY, N.E.C. <sup>3</sup>						
	Total	(NA)	(X)	1 902.4	(NA)	(X)	1 437.1
22522 —	Men's finished hosiery (sizes 10 and up)  Anklets (including slack socks, crew socks, athletic socks, etc.):	(NA)	(×)	844.7	(NA)	(X)	655.0
22522 23	Natural fibers (cotton and/or wool, etc.) mil doz pairs	73 52	43.0	356.7	70	16.7	139.7
22522 25	Manmade fibersdo Midcalf, including half hose:	52	*22.3	206.6	80	34.9	295.1
22522 33 22522 35	Natural fibers (cotton and/or wool, etc.) mil doz pairs.  Manmade fibers	40 27	18.2 8.5	112.4 65.5	30 35	4.3 6.6	37.3 51.4
22522 43	Knee (Bermuda, campus, etc.):  Natural fibers (cotton and/or wool, etc.) mil doz	21	0.5	65.5	33	0.0	31.4
22522 45	paire	23 20	*4.9 *5.0	42.9 39.3	29 30	3.1 7.4	33.2 56.6
22522 87 22522 00	Manmade fibers	10 (NA)	**1.8 (X)	15.5 5.7	6 (NA)	3.2 (X)	31.0 10.6
22525	All other finished hosiery³	(NA)	(X)	694.3	(NA)	(X)	564.5
22525 11	socks, athletic socks, etc.):  Natural fibers (cotton and/or wool, etc.) mil doz						
22525 17	pairs Manmade fibers do	64 48	42.4 14.0	304.6 73.3	57 57	11.5 17.3	72.2 122.5
22525 15	Misses' finished knee-length socks, all fibers (including Bermuda, campus, etc.), sizes 8-11 do Girls' and boys' (excluding anklets): Knee (including Bermuda, campus, etc.):	25	12.4	79.9	37	13.8	112.5
22525 21	Natural fibers (cotton and/or wool, etc.) mil doz	23	3.5	23.6	23	2.0	14.1
22525 27 22525 31	Manmade fibers do All others (including foot socks, stockings, and waist-	21	*3.8	28.0	30	8.9	65.0
	highs) dodododododo	13	*4.0	19.8	17	2.8	31.0
22525 51	Natural fibers (cotton and/or wool, etc.) mil doz pairs	41	14.0	83.7	28	6.2	33.3
22525 57 22525 61	Manmade fibers do Knee (including Bermuda, campus, etc.) do	27 15	6.5 1.5	42.7 11.1	36 18	10.1 3.7	54.3 21.4
22525 81 22525 00	All other (including foot socks, stockings, and waist- highs) All other finished seamless hosiery, n.s.k.	14 (NA)	(S) (X)	13.0 14.6	12 (NA)	4.6 (X)	31.0 7.2
22526	Hosiery shipped in the greige (except women's full-length and		, i			``	
22526 25	pantyhose) mil doz	(NA)	(X)	242.7	(NA)	(X)	155.6
22526 42	Women's and misses' (except full-length and pantyhose);	43	**25.2	133.7	57	*21.1	113.2
22526 51 22526 00	girls' and boys' do Children's and infants' do Hosiery, except women's full-length and pantyhose,	49 19	*20.6 **6.5	85.6 23.4	25 14	6.7 3.2	27.2 13.3
22320 00	shipped in the greige, n.s.k.	-	(X)	-	(NA)	(X)	1.9
22520 — 22520 00	Hosiery, n.e.c., n.s.k Hosiery, n.e.c., n.s.k., typically for establishments with 20	(NA)	(X)	120.7	(NA)	(X)	61.9
22520 02	employees or more (see note)  Hosiery, n.e.c., n.s.k., typically for establishments with less than 20 employees (see note)	(NA) (NA)	(X) (X)	54.0 66.7	(NA) (NA)	(X) (X)	34.2 27.7
2253	KNIT OUTERWEAR MILLS <sup>4</sup>						
	Total	(NA)	(X)	3 283.8	(X)	(X)	3 154.2
22534	Men's and boys' sweaters (from yarns or from fabrics knit in the same establishment):						
22534 00	Men's and boys' sweaters (from yarns or from fabrics knit in the same establishment) (see also code 23293 60) (for additional detail see table 6a-2)	51	(×)	372,7	63	(×)	362.9

## Table 6a-1. Product and Product Classes—Quantity and Value of Shipments by All Producers: 1987 and 1982—Con.

[Includes quantity and value of products of this industry produced by (1) establishments classified in this industry (primary) and (2) establishments classified in other industries (secondary). Transfers of products of this industry from one establishment of a company to another establishment of the same company (interplant transfers) are also included. For further explanation, see Value of Shipments in appendives. For comparability of product classes and product codes between 1987, see appendives. For meaning of abbreviations and symbols, see introductory text?

			1987		1982		
1987 product code	Product	Number of companies with shipments	Product ships		Number of companies with shipments	Product shipr	
		\$100,000 or more	Quantity <sup>2</sup>	Value (million dollars)	\$100,000 or more	Quantity <sup>2</sup>	Value (millior dollars
2253	KNIT OUTERWEAR MILLS4—Con.						
22535 —	Women's, misses', and juniors' sweaters (from yarns or from fabrics knit in the same establishment):						
22535 00	Women's, misses', and juniors' sweaters (from yarns or from fabrics knit in the same establishment) (see also code 23397 30) (for additional detail see table 6a-2)	76	(X)	432.8	88	(X)	310.6
22536 —	Girls', children's, and infants' sweaters (from yarns or from fabrics knit in the same establishment):						
22536 00	Girls', children's, and infants' sweaters (from yarns or from fabrics knit in the same establishment) (see also code 23693 70) (for additional detail see table 6a-2)	19	(X)	59.1	18	(×)	50.9
2253A —	Men's and boys' knit shirts (from yarns or from fabrics knit in the same establishment):						
2253A 00	Men's and boys' knit shirts (from yarns or from fabrics knit in the same establishment) (see also codes 23213 00 and 23261 00) (for additional detail see table 6a-2)	40	(X)	731.8	(NA)	(×)	830.7
2253B	Women's, misses', and juniors' knit shirts and blouses (from yarns or from fabrics knit in the same establishment):						
2253B 00	Women's, misses', and juniors' knit shirts and blouses (from yarns or from fabrics knit in the same establishment) (see also code 23313 00) (for additional detail see table						
	6a-2)	29	(X)	181.5	(NA)	(X)	216.8
2253C	Girls', children's, and infants' knit shirts and blouses (from yarns or from fabrics knit in the same establishment):						
2253C 00	Girls', children's, and infants' knit shirts and blouses (from yarns or from fabrics knit in the same establishment) (see also code 23613 00) (for additional detail see table 6a-2)	9	m	500	(NA)	· ·	40.5
2253D —	All other knit outerwear products (from yarns or from fabrics knit in the same establishment)	(NA)	(X) (X)	52.9 814.5	(NA) (X)	(X)	48.5 751.9
2253D 11	Women's, misses', and juniors':  Dresses (see also code 23353 00) (for additional detail see table 6a-2)	6	, m	30.6	15	· ·	45
2253D 13	Suits (see also code 23372 00) (for additional detail see table 6a-2)	3	(X) (X)	(D)	5	(X) (X)	15.1 36.1
2253D 15	Slacks, jeans, and dungarees (see also code 23395 00) (for additional detail see table 6a-2)	10	(X)	24.2	9	(X)	52.8
2253D 16	Swimwear (see also code 23394 00) (for additional detail see table 6a-2)	4	(X) (X)	(D)	5	(X)	24.4
2253D 19 2253D 33	All other outerwear (see also code 23397)	30	(X)	203.4	48	(X)	213.6
2253D 38 2253D 62	(for additional detail see table 6a-2) Other outerwear, including suits Girls', teenage girls', children's, and infants' other	5 17	(X) (X)	(D) 312.4	- 31	(X)	229.8
2253D 00	outerwear including dresses, slacks, etc. (see also codes 23614, 23615, 23692, and 23693)	10	(X)	153.6	22	(X)	107.4
	knit in the same establishment, n.s.k.	(NA)	(X)	3.0	(NA)	(X)	72.
2253E — 2253E 00	Contract and commission receipts for knitting only or knitting and finishing outerwear products Receipts for knitting only or knitting and finishing outerwear products, typically for establishments with 20 employees	(NA)	(X)	318.9	(NA)	(×)	209.8
2253E 02	or more (see note) Receipts for knitting only or knitting and finishing outerwear	228	(X)	300.4	(NA)	(X)	196.0
	products, typically for establishments with less than 20 employees (see note)	56	(X)	18.4	(NA)	(X)	13.5
22530 22530 00	Knit outerwear mill products, n.s.k., typically for	(NA)	(X)	319.5	(NA)	(X)	372.1
22530 02	establishments with 20 employees or more (see note) Knit outerwear mill products, n.s.k., typically for establishments with less than 20 employees (see note)	(NA) (NA)	(X) (X)	241.6 77.9	(NA) (NA)	(X) (X)	328.0 44.1
2254	KNIT UNDERWEAR MILLS4			Į.			
	Total	(NA)	(X)	803.2	(NA)	(X)	767.4
22541	Men's and boys' knit underwear and nightwear (from yarns or from fabrics knit in the same establishment)	(NA)	(X)	610.2	(NA)	(×)	574.8
22541 11	Men's and boys' underwear (see also code 23221 00) (for additional detail see table 6a-2)	23	(X) (X)	598.2	31	(X) (X)	574.6
22541 13	Men's and boys' nightwear (see also code 23222 00) (for additional detail see table 6a-2)	4	(X) (X)	12.0	10	(X) (X)	15.6
22541 00 22542 —	Men's and boys' knit underwear and nightwear, n.s.k  Women's and children's knit underwear (from yarns or from	-	(X)	-	(NA)	(X)	1.8
22542 00	fabrics knit in the same establishment): Women's and children's knit underwear (from yarns or from						
	fabrics knit in the same establishment) (see also code 23412 00) (for additional detail see table 6a-2)	11	(X)	142.4	27	(X)	125.3
22543 —	Women's and children's knit nightwear (from yarns or from fabrics knit in the same establishment):						
22543 00	Women's and children's knit nightwear (from yarns or from fabrics knit in the same establishment) (see also code						
	23413 00) (for additional detail see table 6a-2)	(NA)	(x) l	41.2	16	(X)	61.

## Table 6a-1. Product and Product Classes—Quantity and Value of Shipments by All Producers: 1987 and 1982—Con.

[Includes quantity and value of products of this industry produced by (1) establishments classified in this industry (primary) and (2) establishments classified in other industries (secondary). Transfers of products of this industry from one establishment of a company to another establishment of the same company (interplant transfers) are also included. For further explanation, see Value of Shipments in appendixes. For comparability of product classes and product codes between 1982 and 1987, see appendixes. For meaning of abbreviations and symbols, see introductory text]

			1987		1982		
1987		Number of	Product ships	ments1	Number of	Product ships	ments <sup>1</sup>
product code	Product	companies with shipments			companies with shipments		
		of \$100,000 or more	Quantity <sup>2</sup>	Value (million dollars)	of \$100,000 or more	Quantity <sup>2</sup>	Value (million dollars
2254	KNIT UNDERWEAR MILLS4—Con.						
22540 — 22540 00	Knit underwear mill products, n.s.k Knit underwear mill products, n.s.k., typically for	(NA)	(X)	9.3	(NA)	(X)	5.4
22540 00	establishments with 10 employees or more (see note)  Knit underwear mill products, n.s.k., typically for	(NA)	(X)	2.4	(NA)	(X)	3.0
22010 02	establishments with less than 10 employees (see note)	(NA)	(X)	6.9	(NA)	(X)	2.4
2257	WEFT (CIRCULAR) KNIT FABRIC MILLS						
	Total	(NA)	(X)	3 539.2	(NA)	(X)	2 494.9
22571 22571 10	Weft (circular) knit fabrics greige goods, except hosierymil lb	(NA) 15	(X) 44,2	872.3 83.8	(NA) 5	(X) 20.7	467.6 36.9
22571 20 22571 00	Broad fabrics (more than 12 inches wide) do Weft knit fabrics greige goods, except hosiery, n.s.k.	55 (NA)	*381.6 (X)	775.6 12.9	38 (NA)	'211.1 (X)	423.7 7.
22573	Finished weft (circular) knit fabrics (except hosiery)	(NA)	(X)	2 102.5	(NA)	(NA)	1 567.7
22573 10	Knit and finished in the same establishment: Narrow fabrics (12 inches wide or less)mil fin lin yd	17	48.0	106.8	(NA)	(NA)	(NA
22573 20	Broad fabrics (more than 12 inches wide) do Purchased and finished in same plant:	49	574.8	1 304.9	(NA)	(NA)	(NA
22573 30 22573 40	Narrow fabrics (12 inches wide or less)mil fin lin yd Broad fabrics (more than 12 inches wide) do Finished weft knit fabrics (except hosiery), n.s.k	19	271.0	578.2	(NA) (NA)	(NA) (NA)	(NA (NA
22573 00 22579	Contract and commission receipts for finishing only or knitting	(NA)	(X)	(D)	(NA)	(NA)	(NA
22579 13	and finishing of weft (circular) knit fabrics (except hosiery)	(NA) 26	(X) (X)	341.2 156.9	(NA) 42	(X)	282.5 175.0
22579 15	Finishing only	3	(X) (X)	(D) 165.3	- 36	(X)	40.
22579 17 22579 00	Broad fabrics (more than 12 inches wide) Receipts for knitting only or knitting and finishing, n.s.k., typically for establishments with 20 employees or more	53	(X)	165.3	30	(~)	40.
22579 02	(see note)	(NA)	(X)	(D)	(NA)	(X)	60.6
22379 02	Receipts for knitting only or knitting and finishing, n.s.k., typically for establishments with less than 20 employees (see note)	(NA)	(X)	1.4	(NA)	(X)	6.4
22570 —	Weft (circular) knit fabrics mill products, n.s.k	(NA)	(X) (X)	223.2	(NA)	(X)	177.
22570 00	Weft (circular) knit fabrics mill products, n.s.k., typically for establishments with 20 employees or more (see note)	(NA)	(X)	158.9	(NA)	(X)	120.9
22570 02	Weft (circular) knit fabrics mill products, n.s.k., typically for establishments with less than 20 employees (see note)	(NA)	(X)	64.3	(NA)	(X)	56.6
2258	WARP KNIT FABRIC MILLS AND LACE GOODS						
	Total	(NA)	(X)	2 106.9	(NA)	(X)	1 641.9
22581	Warp knit fabrics greige goods (tricot, raschel, simplex, and			201.5		00	445
22581 10 22581 20	milanese)  Narrow fabrics (12 inches wide or less)  Broad fabrics (more than 12 inches wide)  Warp knit fabrics greige goods, n.s.k.	(NA)	27.8	391.5 76.3	(NA) 26	**12.4	445.9 45.4 361.4
22581 00	Warp knit fabrics greige goods, n.s.k.	48 (NA)	*116.6 (X)	312.1 3.1	48 (NA)	120.4 (X)	38.7
22584	Finished warp knit fabrics (tricot, raschel, simplex, and milanese)	(NA)	(X)	1 332.5	(NA)	(X)	961.8
22584 10	Knit and finished in the same plant:  Narrow fabrics (12 inches wide or less)mil fin lin yd  Broad fabrics (more than 12 inches wide)do	21	(S)	141.4	(NA)	(NA)	(NA
22584 20	ruichased and infisited in the same plant.	29	**432.6	819.2	(NA)	(NA)	(NA
22584 30 22584 40 22584 00	Narrow fabrics (12 inches wide or less)mil fin lin yd_ Broad fabrics (more than 12 inches wide)do_ Finished warp knit fabrics, n.s.k	14	(S) (S) (X)	(D) 340.5	(NA) (NA)	(NA) (NA)	(NA (NA (NA
22585	Lace and net goods:	(NA)	(x)	(D)	(NA)	(NA)	(IVA
22585 00	Lace and net goods; all leavers and Nottingham lace machine products, including bobbinets and barmen laces;						
	excluding raschel lace machine products and burned-out lace mil sq yd	30	(S)	121.0	37	(S)	66.6
22589	Contract and commission receipts for knitting only or knitting						
22589 15	and finishing warp knit fabrics, or dyeing and finishing of lace and net goods Finishing only	(NA)	(X) (X)	198.0	(NA)	(X) (X)	120.8 74.
22589 13	Knitting only or knitting and finishing: Narrow fabrics (12 inches wide or less)	19		98.1	21		
22589 17 22589 21	Broad fabrics (more than 12 inches wide)	33	(X)	60.5	- (NA)	(X)	31.6
22589 00	net goods (except raschel and burned-out lace)	11	(X)	25.5	(NA)	(X)	6.4
00500 00	employees or more (see note)	(NA)	(X)	9.8	(NA)	(X)	6.5
22589 02	Receipts for knitting only or knitting and finishing warp knit fabrics, n.s.k., typically for establishments with less than 20 employees (see note)	(NA)	(%)	.7	(NA)	(%)	2.2
22580		(NA)	(X) (X)	63.9	(NA) (NA)	(X) (X)	47.1
22580 00	Warp knit fabrics, n.s.k., typically for establishments with 20 employees or more (see note)	(NA)	(X)	33.0	(NA)	(X)	43.5
22580 02	Warp knit fabrics, n.s.k., typically for establishments with less than 20 employees (see note)	(NA)	(X)	30.9	(NA)	(X)	3.6

#### Table 6a-1. Product and Product Classes-Quantity and Value of Shipments by All Producers: 1987 and 1982-Con.

[Includes quantity and value of products of this industry produced by (1) establishments classified in this industry (primary) and (2) establishments classified in other industries (secondary). Transfers of products of this industry from one establishment of a company to another establishment of the same company (interplant transfers) are also included. For further explanation, see Value of Shipments in appendixes. For comparability of product classes and product codes between 1982 and 1987, see appendixes. For meaning of abbreviations and symbols, see introductory text]

			1987		1982			
1987		Number of	Product s	Product shipments <sup>1</sup>		Product shipments <sup>1</sup>		
product code	Product	companies with shipments of \$100,000 or more	Quantity <sup>2</sup>	Value (million dollars)	\$100,000	Quantity <sup>2</sup>	Value (million dollars)	
2259	KNITTING MILLS, N.E.C.S							
	Total	(NA)	(X)	222.4	(NA)	(X)	<b>133.</b> 5	
22590 22590 20	Knit gloves and other knit products: Gloves and mittens including fabrics-and-leather combination (see also codes 2381300, 2381400, and							
	3151000) (for additional detail see table 6a-2)	17	(X)	86.1	9	(X)	36.1	
22590 98	Other knit end products (except fabrics), including knitted towels and washcloths	28	(X)	115.8	24	(X)	68.8	
22590 00 22590 02	Knit gloves and other knit products, n.e.c., n.s.k., typically for establishments with 20 employees or more (see note) Knit gloves and other knit products, n.e.c., n.s.k., typically	(NA)	(X)	15.7	(NA)	(X)	26.7	
22330 02	for establishments with less than 20 employees (see note)	(NA)	(X)	4.8	(NA)	(X)	1.8	

Note: In 1987 Census of Manufactures, data for establishments of small single unit companies with up to 20 employees were estimated from administrative-records data rather than data actually collected from respondents. Employment cutoffs used for administrative records for each industry and shipments figures are included in code ending with "002". In both 1987 and 1982 Censuses of Manufactures, products not completely identified on standard forms were coded in appropriate product class (five-digit) followed by "00" or to appropriate product group code (four-digit) followed by "000".

#### Table 6a-2. Related Products From Current Industrial Reports Series - Value of Shipments by All Producers: 1987 and 1982

[Additional detail is provided in the Current Industrial Report series. For meaning of abbreviations and symbols, see introductory text]

1987		1987 product sh	ipments	1982 product sh	ipments
product code	Product	Quantity	Value (million dollars)	Quantity	Value (million dollars
	MA23A, APPAREL				
	Men's and boys' garments:				
23111 00	Men's tailored suits, including uniform thousands	10 474	1 219.0	111 622	11 101.4
23114 A0	Boys' suits, including casual and uniform do	2 672	58.8	3 473	83.3
23112 00	Men's overcoats, topcoats, and tailored suburban and				
	car coats, including uniform do	1 611	106.2	2 646	120.3
23114 B0	Boys' overcoats, topcoats, and tailored suburban and car				
	coats, including uniform do	(D)	(D)	404	9.0
23113 00	Men's tailored suit-type dress and sport coats, including				
	uniformdo	17 451	997.5	18 011	923.
23113 80	Men's separate vests, excluding sweater vestsdo	329	6.1	1 998	23.8
23114 C0	Boys' tailored suit-type dress and sport coats, including	020	9.1	1 000	20.0
	uniform do	1 301	28.3	22 047	249.
23114 D0	Boys' separate vests, excluding sweater vests do	(D)	(D)	307	1.9
23216 10	Men's woven dress and business shirts, including	(5)	(=)	30.	
	uniform1.000 doz	5 920	794.9	37 484	3749.0
23216 20	Men's woven sport shirtsdo	3 728	349.4	4 168	382.1
23216 30	Boys' woven shirts, including dress and uniform do	1 254	79.8	42 219	4146.2
23213 20	Men's T-shirts and tank tops made for outerwear,		- In		
	including long sleeve T-shirts do	35 130	889.7   -	31 010	1 268.4
23213 10	Men's all other knit shirts, except sweatshirts do	8 711	645.9 🗐		
23213 50	Boys' T-shirts and tank tops made for outerwear,		17		
	including long sleeve T-shirts do	4 635	115.0   -	11 806	410.2
23213 60	Boys' all other knit shirts, except sweatshirts do	2 949	121.9 📙		
23293 F0	Men's sweaters, including sweater vests, knit cardigans,				
	and pullovers do	2 022	345.3	3 235	361.8
23293 G0	Boys' sweaters, including sweater vests, knit cardigans and pullovers do				
00054.40	and pullovers do	367	31.0	361	25.3
23251 10	Men's separate dress and sport trousers, including				
23252 10	uniform thousands	110 684	1 440.3	115 117	1 411.2
23252 10	Men's jeans and dungarees do	153 326 31 911	1 870.0	139 149	1 443.4
23232 20	Men's jean-cut casual slacks do	31 911	371.7	40 799	464.8
23293 10	Men's shorts, including athletic shorts do	46 565	258.8	53 984	528.5
23251 30	Boys' separate dress and sport trousers, including	40 303	250.0	3 904	20.0
	uniformdo	13 292	92.5	14 884	100.7
23252 20	Boys' jeans and dungareesdo	59 171	536.1	64 419	487.3
23252 40	Boys' jean-cut casual slacksdo	13 146	103.9	20 100	137.4
23293 20	Boys' shorts, including athletic shorts do	11 515	49.8	69 548	623.9

¹Data reported by all producers, not just those with shipments of \$100,000 or more.

²For some establishments, data have been estimated from central unit values which are based on quantity-value relationships of reported data. The following symbols are used when percentage of each quantity figure estimated in this manner equals or exceeds 10 percent of published figure: \* 10 to 19 percent estimated; \*\* 20 to 29 percent estimated. If 30 percent or more is estimated, figure is replaced by (S).

³Women's and misses' knee-length socks were moved from industry 2251 to industry 2252 in the 1987 SIC revision.

⁴Data are only for products made in knitting mills. Quantity and value for output of cut-and-sew establishments are shown in Industry 2321, Men's and Boys' Shirts; Industry 2322, Men's and Boys' Underwear; and Industry 2341, Women's and Children's Underwear.

§Includes only gloves and mittens made in knitting mills. Data for gloves and mittens of fabrics (woven or purchased knit) and fabrics-and-leather combinations are included in industry 2381, MC87-I-23D. Data for gloves and mittens of all leather are included in industry 3151, MC87-I-31B.

## Table 6a-2. Related Products From Current Industrial Reports Series—Value of Shipments by All Producers: 1987 and 1982—Con.

1987 product			ipments	1982 product shipments		
code	Product	Quantity	Value (million dollars)	Quantity	Value (million dollars)	
	MA23A, APPAREL—Con.					
23291 10 23293 A0 23291 70 23291 90	Men's and boys' garments—Con.  Men's heavy nontailored outer jackets, except ski, including padded jacket vests and uniform jackets	17 180 17 498 986	434.6 279.3 49.9	719 008 25 584 (NA)	<sup>7</sup> 403.3 296.5 (NA	
23293 40	including padded jacket vestsdo Boys' nontailored light outer jacketsdo	1 959 2 264	43.3 24.2	<sup>7</sup> 2 712 6 180	<sup>7</sup> 44.8 45.3	
23213 70	Sweatshirts1,000 doz	12 152	588.3	4 818	269.8	
23293 D0 23293 A0 23293 60 23293 B0	Sweatpants do	4 592 531 938 988	246.9 67.7 77.7 98.3	1 888 1 316 1 920 1 193	100.0 105.5 117.6 79.6	
23293 50 23293 55	Ski jackets, including ski vests do Ski pants do	(D) 11	(D) 8.6	112 19	52.9 10.3	
23293 59 23262 10	Ski suits and one piece ski coveralls do Work pants, including waistband overalls do	3 730	1.7 383.7	(NA) 3 776	(NA) 365.0	
23262 30 23262 50	Coveralls, overalls, and jumpsuitsdo Men's washable service appareldo	1 041 1 434	215.4 117.5	1 625 1 257	243.6 101.5	
23261 00 23262 80	Work shirts do Overall and work-type jackets do	3 921 273	336.9 45.2	2 978 186	243.4 36.2	
23222 30	Underwear and nightwear: Men's nightwear1,000 doz1,000 doz	999	74.2	1 333	97.7	
23222 50	Men's and hove' woven underwear:	1 403	84.7	1 248	68.4	
23221 10 23221 20	Men's boxer shorts1,000 doz   Boys' boxer shorts do	4 939	91.3	4 394	78.9	
23221 30	Men's and boys' knit underwear: Men's lightweight undershirts (athletic and 1/4 sleeve)			844.485		
23221 40	excluding T-shirts made for outerwear1,000 doz Boy's lightweight undershirts (athletic and 1/4 sleeve)	26 501	480.0	84 006	<sup>8</sup> 244.9	
23221 60	excluding T-shirts made for outerwear	3 695 4 738	48.0 151.4	84 996 3 711	65.7 146.3	
23221 80 23221 90	Men's knit briefs and shorts do Boy's knit briefs and shorts do	28 722 10 311	463.3 109.3	24 170 8 616	337.3 85.2	
23353 00 23372 10	Women's, misses', and juniors' garments:  Dresses	135 271 6 704	3 320.7 267.5	171 748 13 812	3 186.2 432.6	
23397 H0 23314 00	Suits and pantsuits	371 18 518	(NA) 2 005.0	(NA) (°)	(NA ( <sup>8</sup>	
23313 20	Knit T-shirts and tank tops made for outerwear, including long sleeve shirts do	3 005	233.6	(e)	( <del>)</del>	
23313 10	All other knit shirts and blouses (except sweatshirts) do	5 380	536.6	(9)	(8	
23397 A0 23371 10	Sweaters do Coats and capes, except down- or feather-filled, fur, all	5 454	644.8	6 047	484.5 600.5	
23371 30 23374	leather and rain	11 276 182 134 452	657.9 12.5 2 122.6	12 366 (NA) 147 620	(NA 2 289.2	
23374 70 23374 80	Separate tailored suit type jackets do Nontailored outer jackets, excluding ski, but including	18 430	549.2	36 644	892.1	
23374 90	padded jacket vestsdodododo	5 333 774	116.3 15.8	3 520 2 449	106.0 24.4	
23374 A0 23313 40	Skirtsdo Sweatshirts1,000 doz	106 943 3 225	1 441.3 182.9	105 007	1 266.4 ( <sup>9</sup>	
23397 80 23397 60	Sweatpants do Warm-up or jogging suits do	1 829 2 351	96.9 144.3	(NÀ) 1 399	(NÀ 110,0	
23394 00 23397 70	Swimsuits do_   Ski jackets, including ski vests do_	3 208 18	478.2 17.6	3 191 66	406.7 33.6	
23397 75 23397 79	Ski pants do Ski suits and one piece overalls do	8 9	7.7 7.6	18 (NA)	6.9 (NA	
23397 20 23397 E0	Team sports uniforms do Body suits and body shirts do	(D) 94	(D) 8.8	384 (NA)	23.4 (NA	
23397 C0 23397 D0	Playgarments: Shorts, Including jogging and tennis1,000 doz Playsuits, beach tops, halters, and other playwear do	2 563 715	212.7 59.1	2 729 595	157.1 36.0	
23392 00	Washable service apparel, including uniforms, medical and lab jackets, smocks, etc	3 034	283.3	3 405	254.0	
23395 23395 40	Slacks and jeans thousands	222 510 134 464	2 579.7 1 514.4	256 094 168 991	2 625.4 1 679.6	
23395 60	Jeans and dungareesdo	88 046	1 065.3	87 103	945.8	
23615	Girls', children's, toddlers', and infants' garments: Dresses1,000 doz	5 347	528.6	5 891	530.1	
23615 10 23615 70	Girls', children's, and toddlers' do	4 491 856	469.0 59.6	4 279 1 612	402.8 127.3	
23614 — 23614 10	Woven blouses and shirts do Girls', children's, and toddlers' do	3 281 2 881	178.6 157.5 7	(NA)	(NA	
23614 40 23613 —	Infants' do Knit blouses and shirts, including sweatshirts do	400 14 224	21.7 633.9	104 717 1112 076	1º230.6 11446.3	
23613 01 23613 05	Infants'	4 578 1 255	196.8 46.4	(NA) (NA)	(NA (NA	
23613 08 23613 30	Girls', children's, and toddlers' all other knit shirts do	6 770 1 621	302.8 87.9	(NA) (NA)	(NA (NA	
23693 30 23692	Infants knit blouses and shirts do- Sweaters, including sweater vests do- Coats, jackets, and snowsulfs thousands Girls', children's, and toddlers' heavy coats, jackets,	1 035 9 341	75.6 99.2	959 14 016	55.3 146.8	
23692 01	and showsults and hadden! I have a see a s	2 123	30.4	(NA)	(NA	
23692 05	jackets do	7 014	66.3	(NA)	(NA	
23692 70 23693 50	jackets	204 9 851	2.5 69.5	(NA) 19 272	(NA 84.5	
23693 AA	Girls', children's, and toddlers' slacks, including jean-cut casual slacks	38 547 30 099	188.1 212.6	<sup>12</sup> 50 220 <sup>12</sup> 32 580	<sup>12</sup> 232.2	

#### Table 6a-2. Related Products From Current Industrial Reports Series-Value of Shipments by All Producers: 1987 and 1982-Con.

[Additional detail is provided in the Current Industrial Report series. For meaning of abbreviations and symbols, see introductory text]

1987		1987 product sh	nipments	1982 product shipments		
product code	Product	Quantity	(million dollars)	Quantity	Value (million dollars)	
	MA23A, APPAREL—Con.					
23693 F0 23693 60	Girls', children's, toddlers', and infants' garments—Con. Girls', children's, and toddlers' separate sweatpants1,000 doz Infants' pants, jeans, separate sweatpants, shorts, overalls, and coveralls	936	38.1	(NA)	(NA)	
23693 4A 23693 L0	Girls', children's, and toddlers' shorts do	1 166 3 127	70.2 122.5	(NA) 1 694	(NA) 75.4	
23693 NO	playsuits, and halter tops do Infants' playgarments, including sunsuits, creepers, and	1 602	78.6	<sup>13</sup> 2 552	<sup>13</sup> 110.8	
23693 KA	rompersdo Girls', children's, and toddlers' jogging suitsdo	2 892 1 182	202.4 97.2	5 837 (NA)	256.4 (NA)	
23693 P0 23693 Q0	Infants, up to size 24 months, boxed sets do Girls', children's, and toddlers' swimsuits do Women's, misses', and juniors' underwear:	(D) 767	(D) 48.3	(NA) 12868	(NA) 1250.0	
23412 10	Slips full-length and half slips 1.000 doz I	3 611 39 988	223.6 569.6	5 458 35 434	287.2 395.2	
23412 30 23412 40	Panties, including pettipants do	3 135	148.2	3 303	113.2	
23413 30	Nightgowns and sleepcoats, excluding sets with robes1,000 doz	7 280	622.2	9 779	678.7	
23413 40 23413 B0	Pajamas, except sets with robes	1 292 845	97.7 92.9	1 789 1 177	102.8 134.8	
23421 00	Brassieres, bra-lettes, and bandeaux (including maternity) do	1416 267	14797.4	1416 629	14707.2	
23422 30 23422 20	Corsets (including maternity) do Girdlesdo	1420 142 783	142.4 14132.7	143 166	(14)	
23422 40	Combinations and one-piece garments do Girls', children's, and infants' underwear:	14603	1431.4	14298		
23412 50 23412 A0	Girls' sizes 7 to 16 panties, including pettipants1,000 doz Girls' sizes 7 to 16 slips do	4 497 297	34.7 9.9			
23412 B0 23412 D0	Girls' sizes 7 to 16, all other underwear do Girls' sizes 2T to 4T and 4 to 6X panties do	237 3 648	3.6 29.2			
23412 E0 23412 F0	Girls' sizes 2T to 4T and 4 to 6X slips do Girls' sizes 2T to 4T and 4 to 6X all other underwear do	199 (D)	6.9 (D)	(15)	(15)	
23412 G0 23412 H0	Boys' sizes 2T to 4T and 4 to 7 underpants	1 431 (D)	13.1 (D)			
23412 C0	Infants' underwear, including panties, slips, and undershirts	5 420	68.9	8 759	70.2	
	Girls', children's, infants', and toddlers' nightwear, excluding robes:			0 739	70.2	
23413 C0 23413 D0	Girls' sizes 7 to 16 nightgowns1,000 doz Girls' sizes 7 to 16 pajamas, including	705	43.1			
23413 E0	heavyweightsleeping garments made with feet do Girls' sizes 2T to 4T and 4 to 6X nightgowns and	1 165	44.1	(16)	(16)	
23413 G0 23413 F0	pajamas do	1 193 1 122	64.0 55.3			
23693 R0	sleepersdo Girls', children's, and infants' robesdo	2 974 106	119.5 13.4	4 288 222	166.8 17.1	
23840 30	Men's and boys' robes1,000 doz	942	117.1	747	87.0	
23840 70	Women's, misses', and junior's robes, dressing gowns, housecoats, etc do	2 289	321.7	2 652	304.9	
23851 50	Men's and boys' raincoats thousands	3 103	123.5	2 979	116.5	
23851 20	Women's, missses', and juniors' raincoats do	1 346	78.2	4 884	185.1	
23890 71	Garter belts1,000 doz	88	4.0	(NA)	(X)	
	MA23D, GLOVES AND MITTENS					
23813 10	Knit fabrics gloves and mittens1,000 doz pairs	14 261	119.7	18 209	178.1	
23813 20	Woven fabrics gloves and mittens do	8 282	87.9	10 200	170.1	
23814 — 23814 16 23814 17	Leather and fabrics combination gloves and mittens do.  Dress and semidress gloves and mittens do.  Work gloves and mittens do.	728 159 569	36.5 (X) (X)	1 097 199 898	52.4 15.8 36.6	
31510 —	All leather gloves and mittens1,000 doz	1 600	102.4	0.101	120.1	
31510 20	Dress and semidress gloves and mittensdo	1 699 245	123.4 (X)	2 121 374	129.1 33.6	
31510 81 31510 83	All grain work gloves, except welders' do	808 389	(X) (X) (X) (X)	1 017 418	(X) (X) (X)	
31510 89	All other leather work gloves do	257	(X)	312	(X)	

Includes 79 thousand casual nontailored suits, valued at \$3.3 million.
Includes 31 thousand dozen knit shirts, with an unknown value.
Includes 312 thousand dozen knit shirts, with an unknown value.
Includes 312 thousand dozen knit shirts, with an unknown value.
Includes 312 thousand dozen knit shirts, with an unknown value.
Includes athletic shorts, which totaled 21,107 million units in 1987, with an unknown value.
Includes down-and feather-filled coats, jackets, and vests.
Includes down-and feather-filled coats, jackets, and vests.
Includes 2,779 million dozen athletic-type t-shirts, valued at \$37.5 million.
Includes 2,779 million dozen knit blouses, with an unknown value.
Includes 1,419 million dozen knit blouses, with an unknown value.
Includes infant sizes.
Includes girs', childrens', and infants' team sports uniforms.
Includes girs', childrens', and infants' team sports uniforms.
Includes shipments from Puerto Rican plants.
Includes 1982 data for all children's sizes of underwear are as follows: panties and underpants, 8,038 million dozen, \$62.1 million; slips, vests, and undershirts, 1,650 million dozen, at licon. 29.5 million.

16Combined 1982 data for all children's size nightwear are as follows: nightgowns, 1,198 million dozen, valued at \$53.3 million; pajamas, 1,389 million dozen, at \$58.1 million.

## Table 6a-3. Selected Products Primary to More Than One Industry—Value of Shipments by Industry: 1987 and 1982

[Includes quantity and value of products of this industry produced by (1) establishments classified in this industry (primary) and (2) establishments classified in other industries (secondary). Transfers of products of this industry from one establishment of a company to another establishment of the same company (interplant transfers) also are included. For further explanation, see Value Shipments in appendixes. For comparability of product classes and product codes between 1982 and 1987, see appendixes. For meaning of abbreviations and symbols, see introductory text]

		19	87	1982		
1987 product code	Product	Number of companies with shipments of \$100,000 or more	Value of product shipments' (million dollars)	Number of companies with shipments of \$100,000 or more	Value of product shipments' (million dollars)	
20504.00	Sweaters	(NA) (NA) (NA) (NA)	1 190.8 864.6 326.2 434.3	(NA) (NA) (NA) (NA)	940.0 724.4 215.6 403.7	
22534 00 23293 60	Made in knitting mills	50 23 (NA)	372.7 61.6 657.4	63 14 (NA)	362.9 40.8 486.3	
22535 00 23397 30	Made in knitting mills	75 76 (NA)	432.8 224.6 99.1	88 52 (NA)	310.6 169.7 56.0	
22536 00 23693 70	Made in knitting mills  Made from purchased fabric	16 18	59.1 40.0	18	50.9 5.1	
2253A 00 23213 00	Knit shirts and blouses	(NA) (NA) (NA) (NA) 38 184	4 704.1 966.2 3 737.9 2 723.1 731.8 1 991.3	(NA) (NA) (NA) (NA) (NA) (NA)	(NA) (NA) (NA) (NA) 830.7 (NA)	
23213 00 2253B 00 23313 00	Made in cut-and-sew snops  Women's, misses', and juniors'  Made in knitting mills  Made in cut-and-sew shops	(NA) 26 309	1 433.6 1 433.6 181.5 1 252.1	(NA) (NA) (NA) (NA)	(NA) (NA) 216.8 (NA)	
2253C 00 23613 00	Girls', children's, and infants' Made in knitting mills Made in cut-and-sew shops	(NA) 9 97	547.4 52.9 494.5	(NA) (NA) (NA)	(NA) 48.5 (NA)	
22542 00 23412 00	Women's and children's knit underwear Made in knitting mills Made in cut-and-sew shops	(NA) 26 108	1 171.1 142.4 1 028.7	(NA) 27 142	956.3 125.3 831.0	
22543 00 23413 00	Women's and children's knit nightwear	(NA) 12 117	1 267.9 41.2 1 226.7	(NA) 16 (NA)	1 189.3 61.9 1 127.4	
22590 20 23813 00	Gloves and mittens, except all leather Made in weaving mills Made in cut-and-sew shops	(NA) 17 (NA)	225.7 86.1 139.6	(NA) 9 (NA)	231.1 36.1 195.0	

¹Data reported by all producers, not just those with shipments of \$100,000 or more.
²For some establishments, data have been estimated from central unit values which are based on quantity-value relationships of reported data. The following symbols are used when percentage of each quantity figure estimated in this manner equals or exceeds 10 percent of published figure: \* 10 to 19 percent estimated; \*\* 20 to 29 percent estimated. If 30 percent or more is estimated, figure is replaced by (S).

## Table 6b. Product Classes—Value of Shipments by All Producers for Specified States: 1987 and 1982

[Million dollars. Product classes covered are those that are economically significant and whose production is geographically dispersed, provided dispersion is not approximated by data in table 2. Also, product classes are not shown if they are miscellaneous or "not specified by type" classes. Statistics for some States are withheld because they are either less than \$2 million in product class shipments or they disclose data for individual companies in 1987. For meaning of abbreviations and symbols, see introductory text. For comparability of product classes and product codes between 1982 and 1987 and explanation of terms, see appendixes]

Product class and geographic area	1987 value of product shipments	1982 value of product shipments		1987 value of product shipments	1982 value of product shipments
22514, WOMEN'S FINISHED HOSIERY, FULL- LENGTH AND KNEE-LENGTH			22525, ALL OTHER FINISHED HOSIERY United States	694.3	564.5
United States	235.5	240.9			
North Carolina	161.9	(NA)	North Carolina	61.5 28.3 482.0	(NA) (NA) (NA)
22516, WOMEN'S FINISHED PANTYHOSE			Tennessee   Virginia	75.8 17.0	(NA) (NA)
United States	1 132.8	943.2	Wisconsin	8.8	(NA)
North Carolina	632.9	518.7	22526, HOSIERY SHIPPED IN THE GREIGE (EXCEPT WOMEN'S FULL-LENGTH AND PANTYHOSE)		
SHIPPED IN THE GREIGE			United States	242.7	155.6
United States	106.8	85.6		24.9	(NA)
North Carolina	87.8	(NA)	North Carolina Tennessee	185.2 17.8	(NA) (NA)
22522, MEN'S FINISHED HOSIERY (SIZES 10 AND LARGER)			22534, MEN'S AND BOYS' SWEATERS		
United States	844.7	655 <b>.0</b>	United States	372.7	362.9
Alabama	47.4 80.5 499.5 56.8	40.5 390.5	New Jersey	20.5 39.5 87.5 133.6	(NA) (NA) (NA) (NA)

## Table 6b. Product Classes—Value of Shipments by All Producers for Specified States: 1987 and 1982—Con.

[Million dollars. Product classes covered are those that are economically significant and whose production is geographically dispersed, provided dispersion is not approximated by data in table 2. Also, product classes are not shown if they are miscellaneous or "not specified by type" classes. Statistics for some States are withheld because they are either less than \$2 million in product class shipments or they disclose data for individual companies in 1987. For meaning of abbreviations and symbols, see introductory text. For comparability of product classes and product codes between 1982 and 1987 and explanation of terms, see appendixes]

Product class and geographic area	1987 value of product shipments	1982 value of product shipments	Product class and geographic area	1987 value of product shipments	1982 value of product shipments
22535, WOMEN'S, MISSES', AND JUNIORS'	product shipments	product snipments	22543, WOMEN'S AND CHILDREN'S KNIT	product snipments	product snipments
SWEATERS			NIGHTWEAR		
United States	432.8	310.6	United States	41.2	61.9
New Jersey	46.8	(NA)	Pennsylvania	9.5	15.2
New York North Carolina	212.7 4 <b>3</b> .9	(NA) (NA)	22571, WEFT (CIRCULAR) KNIT FABRICS		
Pennsylvania	28.2	(NA)	GREIGE GOODS, EXCEPT HOSIERY		
22536, GIRLS', CHILDREN'S, AND INFANTS' SWEATERS			United States	872.3	467.6
United States	59.1	50.9	California	107.8	(NA) 10.5
		(NA)	North Carolina	452.6	297.2
California	9.4 7.0	(NA)	PennsylvaniaSouth Carolina	54.8 51.2	(NA) (NA)
New York	20.5	(NA)	22573, FINISHED WEFT (CIRCULAR) KNIT FABRICS (EXCEPT HOSIERY)		
			United States	2 102.5	1 567.7
2253A, MEN'S AND BOYS' KNIT SHIRTS			Florida	7.2	(NA)
United States	731.8	830.7	Georgia	55. <b>3</b> 79.0	(NA) (NA)
Alabama	74.5	(NA)	North Carolina	1 138.1	(NA)
Mississippi New York	15.0 11.9	(NA) (NA)	Rhode Island	10.6 145.0	(NA) (NA)
North Carolina	228.7	(NA)	Tennessee	166.3	(NA)
Pennsylvania	48.9	(NA)	22579, CONTRACT AND COMMISSION RECEIPTS		
KNIT SHIRTS AND BLOUSES			United States	341.2	282.5
United States	181.5	216.8	California	22.1	6.5
Florida	4.0	(NA)	New Jersey	16.5	22.3
MississippiPennsylvania	15.0 37.5	(NA) (NA)	New York	18.3 148.9	2 <b>6</b> .4 113.9
		(,	Pennsylvania	49.7	42.8
2253C, GIRLS', CHILDREN'S, AND INFANTS' KNIT SHIRTS AND BLOUSES			South Carolina	29.8 40.0	11.1 (NA)
United States	<b>52.</b> 9	48.5	22581, WARP KNIT FABRICS GREIGE GOODS		
2253D, ALL OTHER KNIT OUTERWEAR PRODUCTS			United States	391.5 8.2	445.5 (NA)
United States	814.5	751.9	Massachusetts	3.6	(NA)
New Jersey	3.9	(NA)	New York	55.7 34.3	34.4 <b>6</b> 2.2
New York	24.5	(NA)	North Carolina	68.9	120.6
North CarolinaOhio	18 <b>6.6</b> 22.1	(NA) (NA)	Rhode Island	5.7	7.6
Pennsylvania	58.8	(NA)	South Carolina	33.3 15.5	(NA) (NA)
2253E, CONTRACT AND COMMISSION RECEIPTS			Virginia	76.0	50.1
	246.0	000.0	22584, FINISHED WARP KNIT FABRICS		
United States	318.9	209.8	United States	1 332.5	961.8
AlabamaCalifornia	6.9 17.0	3.3 10.6	New Jersey	14.8	(NA)
Connecticut	2.3	(NA)	New York North Carolina	12 <b>6</b> .0 583.8	(NA) 508.8
FloridaNew Hampshire	6.4 4.0	3.9 (NA)	Pennsylvania	165.3	(NA)
New Jersey			Rhode Island	86.0	(NA)
New York	43.9 177.6	31.5 95.7	22585, LACE AND NET GOODS		
North Carolina	19.2	6.6		404.0	
Pennsylvania	17.7	31.4	United States	121.0	66.6
22541, MEN'S AND BOYS' KNIT UNDERWEAR			New York	40.9 17.0	(NA) (NA)
AND NIGHTWEAR			North Carolina	12.9	(NA)
United States	610.2	574.8	Rhode Island	24.8	(NA)
North Carolina	<b>6</b> 5.7 56.2	110.1 90.4	22589, CONTRACT AND COMMISSION RECEIPTS		
22542, WOMEN'S AND CHILDREN'S KNIT			United States	198.0	114.5
UNDERWEAR			California	14.7	(NA)
United States	142.4	125.3	New York	27.8 18.7	7.0 15.5
North Carolina	73.7	70.6	North Carolina	66.9	33.5
Pennsylvania	24.0	15.2	Pennsylvania	30.1	14.1

## Table 6c. Historical Statistics for Product Classes—Value Shipped by All Producers: 1987 and Earlier Years

[Million dollars. For meaning of abbreviations and symbols, see introductory text. For comparability of product classes and product codes between 1982 and 1987 and explanation of terms, see appendixes]

1987 product code	Product class	1987	1986¹	19851	19841	19831	1982	1977	1972
2251- 22514 22516 22518 22510	Women's hoslery, except socks²  Women's finished hosiery, full-length and knee-length²  Women's finished pantyhose  Women's hosiery and pantyhose shipped in the greige²  Women's hosiery, except socks, n.s.k.	1 514.5 235.5 1 132.8 106.8 39.4	1 677.5 356.1 1 138.1 102.7 80.6	1 <b>598.9</b> 348.6 1 074.4 103.7 72.2	1 626.1 378.2 1 073.5 104.9 69.5	1 568.4 419.9 1 009.1 94.6 44.8	1 312.8 240.9 943.2 85.6 43.1	819.1 723.4 58.4 37.3	899.0 777.2 101.1 21.7
2252- 22522 22525 22526	Hoslery, n.e.c.² Men's finished hosiery (sizes 10 and larger) All other finished hosiery² Hosiery shipped in the greige (except women's full-length and	1 <b>902.4</b> 844.7 694.3	1 568.9 767.6 736.4	1 518.2 723.3 729.1	1 575.7 760.6 742.3	1 <b>51</b> 6.6 731.2 711.2		8 <b>93.</b> 6 464.6 367.8	<b>588.0</b> 285.9 267.3
22520	pantyhose) <sup>2</sup> Hosiery, n.e.c., n.s.k	242.7 120.7	64.9	65.8	72.6	74.2	L 155.6 61.9	61.2	34.8
2253- 22534 22535 22536 2253A 2253B 2253C 2253C 2253D 2253E 22530	Knit outerwear mills  Men's and boys' sweaters  Women's, misses', and juniors' sweaters  Girls', children's, and infants' sweaters  Men's and boys' knit shirts  Women's, misses', and juniors' knit shirts and blouses  Girls', children's, and infants' knit shirts and blouses  All other knit outerwear products  Contract and commission receipts  Knit outerwear mill products, n.s.k.	3 283.8 372.7 432.8 59.1 731.8 181.5 52.9 814.5 318.9 319.5	3 241.6 (NA) (NA) (NA) (NA) (NA) (NA) (NA) 289.9 219.3	3 220.1 (NA) (NA) (NA) (NA) (NA) (NA) (NA) (NA)	3 348.1 (NA) (NA) (NA) (NA) (NA) (NA) (NA) 319.1 229.5	3 383.4 (NA) (NA) (NA) (NA) (NA) (NA) (NA) 230.9 281.2	3 154.2 362.9 310.6 50.9 830.7 216.8 48.5 751.9 209.8 372.1	2 136.6 (NA) (NA) (NA) (NA) (NA) (NA) (NA) 154.2 219.1	1 571.1 (NA) (NA) (NA) (NA) (NA) (NA) (NA) 205.8
2254- 22541 22542 22543 22540	Knit underwear mills	803.2 610.2 142.4 41.2 9.3	1 025.6 828.0 148.4 36.5 12.7	<b>985.</b> 6 762.5 136.1 62.0 24.9	919.8 685.8 129.5 63.4 41.1	812.2 556.6 161.2 68.9 (S)	767.4 574.8 125.3 61.9 5.4	<b>579.5</b> 431.0 95.4 50.0 3.1	481.5 360.3 73.0 45.9 2.3
2257- 22571 22573 22579 22570	Weft (circular) knit fabrics mills	3 539.2 872.3 2 102.5 341.2 223.2	2 475.5 505.5 1 517.8 237.5 214.7	2 076.8 369.9 1 307.3 237.9 161.7	2 273.6 389.4 1 424.2 277.0 183.0	2 501.2 484.2 1 577.7 297.7 141.6	2 494.9 467.6 1 567.7 282.5 177.1	3 111.2 343.5 2 321.7 286.1 159.9	2 770.2 163.2 2 086.7 394.0 126.3
2258- 22581 22584 22585 22589 22580	Warp knit fabrics mills and lace goods <sup>2</sup> Warp knit fabrics greige goods Finished warp knit fabrics Lace and net goods <sup>3</sup> Contract and commission receipts Warp knit fabrics and lace goods, n.s.k.	2 106.9 391.5 1 332.5 121.0 198.0 63.9	1 787.7 400.6 1 077.0 67.5 178.2 64.4	1 884.3 445.8 1 156.5 78.4 157.8 45.8	1 814.0 526.4 1 008.3 83.4 128.8 67.1	1 972.0 599.9 1 047.4 67.6 193.2 63.9	1 641.9 445.5 961.8 66.6 120.8 47.1	1 608.2 363.3 1 036.3 39.8 138.7 30.1	968.4 151.9 675.3 39.8 95.5 5.9
<b>2259-</b> 22590	Knitting mills, n.e.c. Knit gloves and other knit products	<b>222.4</b> 222.4	<b>159.0</b> 159.0	16 <b>8.4</b> 168.4	<b>159.1</b> 159.1	16 <b>5.1</b> 165.1	1 <b>33.5</b> 133.5	11 <b>2.9</b> 112.9	<b>87.</b> 1 87.1

<sup>&</sup>lt;sup>1</sup>Figures are estimates derived from a representative sample of manufacturing establishments. Standard errors associated with estimates are published in annual survey of manufactures publications for this period.

<sup>2</sup>See footnote, table 6a-1.

#### Table 7. Materials Consumed by Kind: 1987 and 1982

[Includes quantity and cost of materials consumed or put into production by establishments classified only in this industry. For further explanation, see Cost of Materials in appendixes. For meaning of abbreviations and symbols, see introductory text]

1987		1987		1982		
material code	Material	Quantity <sup>1</sup>	Delivered cost (million dollars)	Quantity <sup>1</sup>	Delivered cost (million dollars)	
	INDUSTRY 2251, WOMEN'S HOSIERY, EXCEPT SOCKS					
	Materials, containers, and supplies	(X)	667.0	(X)	551.2	
225011 225021 228102 228141 228145 282411 282435	Hosiery in the greige, except pantyhose	(X) (X) (S) (S) (S) *71.3 *11.9	44.5 65.5 10.2 46.6 15.5 188.1	(X) (X) **5.6 **7.0 *6.9 46.9	45.6 67.1 9.6 22.0 17.8 173.3 76.2	
228011 970099 971000	All other yarns do All other materials, containers, and supplies Materials, containers, and supplies, n.s.k.²	(S) (X) (X)	16.8 154.7 14.6	(S) (X) (X)	8.1 100.9 30.6	
	INDUSTRY 2252, HOSIERY, N.E.C.					
	Materials, containers, and supplies	(X)	905.0	(X)	734.5	
225011 228102 228141 228145 282411 282435	Hosiery in the greige, except pantyhose	(X) (S) (S) *46.8 *19.5 (S)	264.3 179.9 35.6 80.9 43.5 16.0	(X) *50.0 (S) *69.6 *25.8 2.0	204.9 78.4 26.6 146.2 68.4 10.7	
228011 970099 971000	All other yarns. do_ All other materials, containers, and supplies Materials, containers, and supplies n.s.k.2	(S) (X) (X)	60.7 192.0 32.1	*25.3 (X) (X)	56.3 94.4 48.6	

#### Table 7. Materials Consumed by Kind: 1987 and 1982—Con.

[includes quantity and cost of materials consumed or put into production by establishments classified only in this industry. For further explanation, see Cost of Materials in appendixes. For meaning of abbreviations and symbols, see introductory text]

4007		1987		1982			
1987 material code	Material	Quantity <sup>1</sup>	Delivered cost (million dollars)	Quantity <sup>1</sup>	Delivered cost (million dollars)		
	INDUSTRY 2253, KNIT OUTERWEAR MILLS						
	Materials, containers, and supplies	(X)	1 238.8	(X)	1 047.9		
225078	Knit fabricsmil lb_	(S)	13.7	(S)	64.2		
	Fibers:						
013101 021401 282014	Raw cotton1,000 bales Raw woolmil lb Manmade (staple and tow) do  Yarns:	(S) *1.8 (S)	3.9 3.5 4.9	(3) (3) (NA)	(3) (3) (NA)		
228110	Cotton: Carded cottonmil lb	*91.0	164.9	*57.5	116.8		
228120 228130	Combed cotton do Manmade: Rayon and acetate spunmll lb	*84.2	161.4	*19.8 4.8	44.2 6.2		
228141	Nylon spun do	(S) (S) ••70.7	8.4	*2.2	5.0		
228143 282301	Polyester spun do Rayon and acetate filament do		111.3 11.0	44.7	81.3 1.3		
282411 282423	Nylon filament do do Polyester filament do	(S) (S) (S)	21.5 65.1	6.8 18.8	16.8 25.3		
228145 228301	Acrylic do do do	**64.ó	139.9 29.2	58.6 11.9	138.6 39.9		
228001 970099	All other do All other materials, containers, and supplies	17.8	39.0 402.3	**17.8	30.3 3229.1		
971000	Materials, containers, and supplies, n.s.k.2	×	38.8	(%)	248.9		
	INDUSTRY 2254, KNIT UNDERWEAR MILLS						
	Materials, containers, and supplies	(X)	510.4	(X)	329.9		
225078	Knit fabricsmil lb	(S)	8.8	(S) 53.9	5.3		
228110 228120	Carded cotton yarns do Combed cotton yarns do	(S) (S) 23.0	158.8 46.5	53.9 18,5	83.8 35.9		
228000 228145	Combed cotton yarns do.  Manmade liber yarns, filament and spun do.  Manmade fiber yarns, acrylic do.	42.7 2.3	64.0 3.7	31.9 (NA)	57.4 (NA)		
228013	All other materials, containers, and supplies	9.3	22.1	15.5	28.8		
970099 971000	Materials, containers, and supplies	(X) (X)	202.9 3.6	(X) (X)	112.0 6.7		
	INDUSTRY 2257, WEFT (CIRCULAR) KNIT FABRIC MILLS						
	Materiala, containers, and supplies	(X)	1 971.9	(X)	1 474.3		
225078	Knit fabricsmil lb_	*160.7	269.8	*109.2	199.9		
	Fibers:						
013101 021401	Raw cotton1,000 bales Raw woolmil lb	**97.9 (S)	30.7 8.9	42.7 (D)	15.2 (D)		
282014	Manmade (staple and tow) do Yarns:	(S) 74.8	59.6	105.4	132.3		
228110	Cotton: Carded cottonmil lb_	*70.1	118.9	25.9	43.8		
228120	Combed cotton do	*157.2	287.8	57.3	122.2		
228130	Manmade: Rayon and acetate spunmil lb	(S) (S)	(D)	(D)	(D)		
228141 228143	Nylon spun do Polyester spun do	(S) 155.6	3.9 207.8	(D) 135.0	(D) 209.6		
282301 282411	Rayon and acetate filament do Nylon filament do	(S) 7.0	5.6 17.1	(D) 4.7	(D) 10.6		
282423	Polyester filament do	*112.5	172.9	*112.8	159.3		
228145 228301	Acrylic do Wool do	*28.0 (S)	41.7 23.5	30.0 1.0	46.6 3.0		
228001 282104	All other do Plastics resins consumed in the form of granules, pellets,	*46.9	77.9	19.8	50.1		
308007	powders, liquids, etc do Plastics products consumed in the form of sheets, rods.	(D)	(D)	(3)	(3)		
	tubes, and other shapes	(X)	(D)	(%)	(3)		
970099 971000	All other materials, containers, and supplies Materials, containers, and supplies, n.s.k.2	(X) (X)	518.9 93.8	(X) (X)	<sup>3</sup> 164.0 243.4		
	INDUSTRY 2258, LACE AND WARP KNIT FABRIC MILLS						
	Materials, containers, and supplies	(X)	1 093.2	(X)	827.4		
225078	Knit fabricsmil lb	*37.8	87.2	86.1	111.7		
013101	Fibers: Raw cotton1,000 bales			10			
282014	Manmade (staple and tow)mil lb_	(S)	46.8	4.6 20.6	1.7 12.8		

#### Table 7. Materials Consumed by Kind: 1987 and 1982—Con.

[Includes quantity and cost of materials consumed or put into production by establishments classified only in this industry. For further explanation, see Cost of Materials in appendixes. For meaning of abbreviations and symbols, see introductory text]

4007		1987		1982			
1987 material code	Material	Quantity <sup>1</sup>	Delivered cost (million dollars)	Quantity <sup>1</sup>	Delivered cost (million dollars)		
	INDUSTRY 2258, LACE AND WARP KNIT FABRIC MILLS—Con.						
228110 228120	Yarns: Cotton: Cardedmil lb Combeddo Manmade:	(S) (S)	31.6 29.1	5.2 (S)	7.1 1.0		
228130 228141 228143 282301 282411 282423 228145 228301 228001 970099	Rayon and acetate spun	(S) (S) *30.1 *81.6 *108.1 8.9 - *17.7 (X) (X)	12.8 50.4 47.7 161.9 189.1 14.8 44.8 352.3	5.7 7.6 37.6 55.6 87.6 74.0 (D) (D) *33.2 (X)	13.1 18.3 70.9 82.6 187.4 107.6 (D) (D) 52.1		
971000	Materials, containers, and supplies, n.s.k.²	(x)	24.7	(X)	49.7		
	Materials, containers, and supplies	(X)	79.3	(X)	49.0		
225078 228120 228110 970099 971000	Knit fabrics	(D) (S) (S) (X)	(4) 4.9 25.3 446.7 2.4	(S) - *6.5 (X) (X)	5.8 - 11.2 17.8 14.2		

<sup>&</sup>lt;sup>1</sup>For some establishments, data have been estimated from central unit values which are based on quantity-cost relationships of reported data. The following symbols are used when percentage of each quantity figure estimated in this manner equals or exceeds 10 percent of published figure: \* 10 to 19 percent estimated; \*\* 20 to 29 percent estimated. If 30 percent or more is estimated, figure is replaced by (5).

<sup>2</sup>Total cost of materials of establishments that did not report detailed materials data, including establishments that were not mailed a form.

<sup>3</sup>For 1982, these material codes were included with material code 970099.

<sup>4</sup>For 1987, material code 225078 is combined with material code 970099 to avoid disclosing data for individual companies.

## APPENDIX A. Explanation of Terms

This appendix is in two sections. Section 1 includes items requested of all establishments mailed census of manufactures forms including annual survey of manufactures (ASM) forms. Note that this section also includes several items (number of establishments and companies, value added, classes of products, and specialization and coverage ratios) not included on the report forms but derived from information collected on the forms. Section 2 covers supplementary items requested only from establishments included in the ASM sample. Results of the supplementary ASM inquiries are included in table 3c of this report.

## SECTION 1. ITEMS COLLECTED OR DERIVED BASED ON ALL CENSUS OF MANUFACTURES (INCLUDING ASM) REPORT FORMS

Number of establishments and companies—As discussed in the Introduction, a separate report was required for each manufacturing establishment (plant) with one employee or more. An establishment is defined as a single physical location where manufacturing is performed. A company, on the other hand, is defined as a business organization consisting of one establishment or more under common ownership or control.

If the company operated at different physical locations, even if the individual locations were producing the same line of goods, a separate report was requested for each location. If the company operated in two or more distinct lines of manufacturing at the same location, a separate report was requested for each activity.

An establishment not in operation for any portion of the year was requested to return the report form with the proper notation in the "Operational Status" section of the form. In addition, the establishment was requested to report data on any employees, capital expenditures, inventories, or shipments from inventories during the year.

In this report, data are shown for establishments in operation at any time during the year. A comparison with the number of establishments in operation at the end of the year will be provided in the Introduction of the General Summary subject report.

**Employment and related items**—The report forms requested separate information on production workers for a specific payroll period within each quarter of the year and on other employees as of the payroll period which included the 12th of March.

All employees—This item includes all full-time and part-time employees on the payrolls of operating manufacturing establishments during any part of the pay period which included the 12th of the months specified on the report form. Included are all persons on paid sick leave, paid holidays, and paid vacations during these pay periods.

Officers of corporations are included as employees; proprietors and partners of unincorporated firms are excluded. The "all employees" number is the average number of production workers plus the number of other employees in mid-March. The number of production workers is the average for the payroll periods including the 12th of March, May, August, and November.

**Production workers**—This item includes workers (up through the line-supervisor level) engaged in fabricating, processing, assembling, inspecting, receiving, storing, handling, packing, warehousing, shipping (but not delivering), maintenance, repair, janitorial and guard services, product development, auxiliary production for plant's own use (e.g., power plant), recordkeeping, and other services closely associated with these production operations at the establishment covered by the report. Employees above the working-supervisor level are excluded from this item.

All other employees—This item covers nonproduction employees of the manufacturing establishment including those engaged in factory supervision above the line-supervisor level. It includes sales (including driver salespersons), sales delivery (highway truck drivers and their helpers), advertising, credit, collection, installation and servicing of own products, clerical and routine office function, executive, purchasing, financing, legal, personnel (including cafeteria, medical, etc.), professional, and technical employees. Also included are employees on the payroll of the manufacturing establishment engaged in the construction of major additions or alterations to the plant and utilized as a separate work force.

In addition to reports sent to operating manufacturing establishments, information on employment during the payroll period which included March 12 and annual payrolls also was requested of auxiliary units (e.g., administrative offices, warehouses, and research and development laboratories) of multiestablishment companies. However, these figures are not included in the totals for individual

industries shown in this report. They are included in the general summary and geographic area reports as a separate category.

Payroll—This item includes the gross earnings of all employees on the payroll of operating manufacturing establishments paid in the calendar year 1987. Respondents were told they could follow the definition of payrolls used for calculating the Federal withholding tax. It includes all forms of compensation, such as salaries, wages, commissions, dismissal pay, bonuses, vacation and sick leave pay, and compensation in kind, prior to such deductions as employees' Social Security contributions, withholding taxes, group insurance, union dues, and savings bonds. The total includes salaries of officers of corporations; it excludes payments to proprietors or partners of unincorporated concerns. Also excluded are payments to members of Armed Forces and pensioners carried on the active payroll of manufacturing establishments.

The census definition of payrolls is identical to that recommended to all Federal statistical agencies by the Office of Management and Budget. It should be noted that this definition does not include employers' Social Security contributions or other nonpayroll labor costs, such as employees' pension plans, group insurance premiums, and workers' compensation.

The ASM provides estimates of employers' supplemental labor costs, both those required by Federal and State laws and those incurred voluntarily or as part of collective bargaining agreements. (Supplemental labor costs are explained later in this appendix.)

As in the case of employment figures, the payrolls of separate auxiliary units of multiestablishment companies are not included in the totals for individual industries or industry groups.

**Production-worker hours**—This item covers hours worked or paid for at the plant, including actual overtime hours (not straight-time equivalent hours). It excludes hours paid for vacations, holidays, or sick leave.

Cost of materials—This term refers to direct charges actually paid or payable for items consumed or put into production during the year, including freight charges and other direct charges incurred by the establishment in acquiring these materials. It includes the cost of materials or fuel consumed, whether purchased by the individual establishment from other companies, transferred to it from other establishments of the same company, or withdrawn from inventory during the year.

The important components of this cost item are (1) all raw materials, semifinished goods, parts, containers, scrap, and supplies put into production or used as operating supplies and for repair and maintenance during the year, (2) electric energy purchased, (3) fuels consumed for heat, power, or the generation of electricity, (4) work done by

others on materials or parts furnished by manufacturing establishments (contract work), and (5) products bought and resold in the same condition. (See discussion of duplication of data below.)

Specific materials consumed—In addition to the total cost of materials, which every establishment was required to report, information also was collected for most manufacturing industries on the consumption of major materials used in manufacturing. The inquiries were restricted to those materials which were important parts of the cost of production in a particular industry and for which cost information was available from manufacturers' records. Information on the establishments consuming less than a specified amount (usually \$10,000) of a specific material were not requested to report consumption of that material separately. Also, the cost of materials for the small establishments for which either administrative records or short forms were used was imputed as "not specified by kind." (See the introduction for the importance of administrative records in the industry.)

Value of shipments—This item covers the received or receivable net selling values, f.o.b. plant (exclusive of freight and taxes), of all products shipped, both primary and secondary, as well as all miscellaneous receipts, such as receipts for contract work performed for others, installation and repair, sales of scrap, and sales of products bought and resold without further processing. Included are all items made by or for the establishments from materials owned by it, whether sold, transferred to other plants of the same company, or shipped on consignment. The net selling value of products made in one plant on a contract basis from materials owned by another was reported by the plant providing the materials.

In the case of multiunit companies, the manufacturer was requested to report the value of products transferred to other establishments of the same company at full economic or commercial value, including not only the direct cost of production but also a reasonable proportion of "all other costs" (including company overhead) and profit. (See discussion of duplication of data below.)

Individual products—As in previous censuses, data were collected for most industries on the quantity and value of individual products shipped. In the 1987 census program, information was collected on the output of approximately 11,000 individual product items. The term "product", as used in the census of manufactures, represents the finest level of detail for which output information was requested. Consequently, it is not necessarily synonymous with the term "product" as used in the marketing sense. In some cases, it may be much more detailed and, in other cases, it is more aggregative. For example, "pharmaceutical preparations" was distributed into over 100 terms; whereas, "motor gasoline" was reported as a single item.

Approximately 6,600 of the product items were listed separately on the 1987 census report forms. Data for

about 4,400 products were obtained in the monthly, quarterly, or annual surveys comprising the Current Industrial Reports series of the Census Bureau. Totals for the year 1987 for these items, as derived from the commodity surveys, are shown in the "products shipped" table (table 6a-2).

The list of products for which separate information was collected was prepared after consultation with industry and government representatives. Comparability with previous figures was given considerable weight in the selection of product categories so that comparable 1982 information is presented for most products.

Typically, both quantity and value of shipments information were collected. However, if quantity was not significant or could not be reported by manufacturers, only value of shipments was collected.

Shipments include both commercial shipments and transfers of products to other plants of the same company. For industries in which a considerable portion of the total shipments is transferred to other plants of the same company, separate information on interplant transfers also was collected. Moreover, for products that are used to a large degree within the same establishment as materials or components in the fabrication of other products, total production and often consumption of the item within the plant was collected. Typically, the information on production also was collected for products for which there are significant differences between total production and shipments in a given year because of wide fluctuations in finished goods inventories. Other measures of output of products with long production cycles were used as appropriate and feasible.

Classes of products—To summarize the product information, the separate products were aggregated into classes of products that, in turn, were grouped into all primary products of each industry. The code structure used is a seven-digit number for the individual product, a five-digit number for the class of product, and a four-digit number for the total primary products in an industry. (See Introduction, Industry Classification of Establishments, for application of the coding structure to the assignment of SIC codes for establishments.)

In the 1987 census, the 11,000 products were grouped into approximately 1,500 separate classes on the basis of general similarity of manufacturing processes, types of materials used, and the like. However, the grouping of products was affected by the economic significance of the class and, in some cases, dissimilar products were grouped because the products were not sufficiently significant to warrant separate classes.

Duplication in cost of materials and value of shipments— The aggregate of the cost of materials and value of shipments figures for industry groups and for all manufacturing industries includes large amounts of duplication since the products of some industries are used as materials by others. This duplication results, in part, from the addition of related industries representing successive stages in the production of a finished manufactured product. Examples are the addition of flour mills to bakeries in the food group and the addition of pulp mills to paper mills in the paper and allied products group of industries. Estimates of the overall extent of this duplication indicate that the value of manufactured products exclusive of such duplication (the value of finished manufactures) tends to approximate two-thirds of the total value of products reported in the annual survey.

Duplication of products within individual industries is significant within a number of industry groups, e.g., machinery and transportation industries. These industries frequently include complete machinery and their parts. In this case, the parts made for original equipment are materials consumed for assembly plants in the same industry.

Even when no significant amount of duplication is involved, value of shipments figures are deficient as measures of the relative economic importance of individual manufacturing industries or geographic areas because of the wide variation in ratio of materials, labor, and other processing costs of value of shipments, both among industries and within the same industry.

Before 1962, cost of materials and value of shipments were not published for some industries which included considerable duplication. Since then, these data have been published for all industries at the United States level and beginning in 1964, for all geographic levels.

Value added by manufacture—This measure of manufacturing activity is derived by subtracting the cost of materials, supplies, containers, fuel, purchased electricity, and contract work from the value of shipments (products manufactured plus receipts for services rendered). The result of this calculation is adjusted by the addition of value added by merchandising operations (i.e., the difference between the sales value and the cost of merchandise sold without further manufacture, processing, or assembly) plus the net change in finished goods and work-in-process between the beginning- and end-of-year inventories.

For those industries where value of production is collected instead of value of shipments (see footnote in table 1a), value added is adjusted only for the change in work-in-process inventories between the beginning and end of year. For those industries where value of work done is collected, the value added does not include an adjustment for the change in finished goods or work-in-process inventories.

"Value added" avoids the duplication in the figure for value of shipments that results from the use of products of some establishments as materials by others. Value added is considered to be the best value measure available for comparing the relative economic importance of manufacturing among industries and geographic areas.

New and used capital expenditures—For establishments in operation and any known plants under construction, manufacturers were asked to report their new expenditures for (1) permanent additions and major alterations to

manufacturing establishments, and (2) machinery and equipment used for replacement and additions to plant capacity if they were of the type for which depreciation accounts were ordinarily maintained.

The totals for new expenditures include expenditures leased from nonmanufacturing concerns through capital leases, new facilities owned by the Federal Government but operated under contract by private companies, and plant and equipment furnished to the manufacturer by communities and nonprofit organizations. Also excluded are expenditures for used plant and equipment (although reported in the census), expenditures for land, and cost of maintenance and repairs charged as current operating expenses.

Manufacturers also were requested to report the value of all used buildings and equipment purchased during the year at the purchase price. For any equipment or structure transferred for the use of the reporting establishment by the parent company or one of its subsidiaries, the value at which it was transferred to the establishment was to be reported. Furthermore, if the establishment changed ownership during the year, the cost of the fixed assets (building and equipment) was to be reported under used capital expenditures.

Total expenditures for used plant and equipment is a universe figure; it is collected on all census forms. However, the breakdown of this figure between expenditures for used buildings and other structures and expenditures for used machinery and equipment is collected only on the ASM form. The data for total new capital expenditures, new building expenditures, and new machinery expenditures, as well as the data for total used expenditures, are shown in table 3b.

End-of-year inventories—Respondents were asked to report their 1986 and 1987 end-of-year inventories at cost or market. Effective with the 1982 Economic Censuses, this change to a uniform instruction for reporting inventories was introduced for all sector reports. Prior to 1982, respondents were permitted to value inventories using any generally accepted accounting method (FIFO, LIFO, market, to name a few). In 1982, LIFO users were asked to first report inventory values prior to the LIFO adjustment and then to report the LIFO reserve and the LIFO value after adjustment for the reserve.

Because of this change in reporting instructions, the 1982 through 1987 data for inventories and value added by manufacture included in the tables of this report are not comparable to the prior-year data shown in table 1a of this report and in historical census of manufactures and annual survey of manufactures publications.

In using inventory data by stage of fabrication for "all industries" and at the two-digit industry level, it should be noted that an item treated as a finished product by an establishment in one industry may be reported as a raw material by another establishment in a different industry. For example, the finished-product inventories of a steel mill would be reported as raw materials by a stamping plant. Such differences are present in the inventory figures by stage of fabrication shown for individual industries, industry groups, and "all manufacturing", which are aggregates of figures reported by establishments in specified industries.

**Specialization and coverage ratios—**These items are not collected on the report forms but are derived from the data shown in table 5b. An establishment is classified in a particular industry if its shipments of primary products of that industry exceed in value its shipments of the products of any other single industry.

As noted in the introduction, an establishment's shipments include those products assigned to an industry (primary products), those considered primary to other industries (secondary products), and receipts for miscellaneous activities (merchandising, contract work, resales, etc.). Specialization and coverage ratios have been developed to measure the relationship of primary product shipments to the data on shipments for the industry shown in tables 1a through 5a and data on product shipments shown in tables 6a through 6c.

Specialization ratio represents the ratio of primary product shipments to total product shipments (primary and secondary, excluding miscellaneous receipts) for the establishments classified in the industry.

Coverage ratio represents the ratio of primary products shipped by the establishments classified in the industry to the total shipments of such products that are shipped by all manufacturing establishments wherever classified.

#### SECTION 2. ITEMS COLLECTED ONLY ON ASM REPORT FORMS

The following items were collected only from establishments included in the ASM sample:

 Supplemental labor costs—Supplemental labor costs are divided into legally required expenditures and payments for voluntary programs. The legally required portion consists primarily of Federal old age and survivors' insurance, unemployment compensation, and workers' compensation. Payments for voluntary programs include all programs not specifically required by legislation whether they were employer initiated or the result of collective bargaining. They include the employer portion of such plans as insurance premiums, premiums for supplemental accident and sickness insurance, pension plans, supplemental unemployment compensation, welfare plans, stock purchase plans on which the employer payment is not subject to withholding tax, and deferred profit-sharing plans.

They exclude such items as company-operated cafeterias, in-plant medical services, free parking lots, discounts on employee purchases, and uniforms and work clothing for employees. While the excluded items do benefit employees and all or part of their cost generally is similar to the items covered in the ASM labor costs statistics, accounting records generally do not provide reliable figures on net employee benefits of these types.

- 2. Retirements of depreciable assets—Included in this item is the gross value of assets sold, retired, scrapped, destroyed, etc., during 1987. When a complete operation or establishment changed ownership, the respondent was instructed to report the value of the assets sold at the original cost as recorded in the books of the seller. The respondent also was requested to report retirements of equipment or structures owned by a parent company that the establishment was using as if it were a tenant.
- 3. Depreciation charges for fixed assets—This item includes depreciation and amortization charged during the year against assets. Depreciation charged against fixed assets acquired since the beginning of the year and against assets sold or retired during the year are components of this category. Respondents were requested to make certain that they did not report accumulated depreciation.
- 4. Rental payments—Total rental payments is collected on all census forms. However, the breakdown between rental payments for buildings and other structures and rental payments for machinery and equipment is collected only on the ASM forms. This item includes rental payments for the use of all items for which depreciation reserves would be maintained if they were owned by the establishment, e.g., structures and buildings, and production, office, and transportation equipment. Excluded are royalties and other payments for the use of intangibles and depletable assets, and land rents where separable.

When an establishment of a multiestablishment company was charged rent by another part of the same company for the use of assets owned by the company, it was instructed to exclude that cost from rental payments. However, the book value (original cost) of these company-owned assets was to be reported as assets of the establishment at the end of the year.

If there were assets at an establishment rented from another company and the rents were paid centrally by the head office of the establishment, the company was instructed to report these rental payments as if they were paid directly by the establishment.

Depreciable assets—Total value of gross depreciable assets is collected on all census forms. However, the detail for depreciable assets is collected only on the ASM forms. The data encompass all fixed depreciable assets on the books of establishments at the beginning and end of the year. The values shown (book value) represent the actual cost of assets at the time they were acquired, including all costs incurred in making the assets usable (such as transportation and installation). Included are all buildings, structures, machinery, and equipment (production, office, and transportation equipment) for which depreciation reserves are maintained. Excluded are nondepreciable capital assets, including inventories and intangible assets, such as timber and mineral rights.

The definition of fixed depreciable assets is consistent with the definition of capital expenditures. For example, expenditures include actual capital outlays during the year, rather than the final value of equipment put in place and buildings completed during the year. Accordingly, the value of assets at the end of the year includes the value of construction in progress. In addition, respondents were requested to make certain that assets at the beginning of the year plus new and used capital expenditures, less retirements, equalled assets at the end of the year.

- 6. New and used capital expenditures—The data for total new capital expenditures, new building expenditures, new machinery expenditures, and total used capital expenditures are collected on all census forms. However, the preakdown between expenditures for used buildings and other structures and expenditures for used machinery and equipment is collected only on the ASM form. (See further explanation on capital expenditures in section 1.)
- 7. Quantity of electric energy consumed for heat and power—Data on the cost of purchased electric energy were collected on all census forms. However, data on the quantity of purchased electric energy were collected only on the ASM forms. In addition, information was collected on the quantity of electric energy generated by the establishment and the quantity of electric energy sold or transferred to other plants of the same company.
- 8. Breakdown of new capital expenditures for machinery and equipment—ASM establishments were requested to separate their capital expenditures for new machinery and equipment into (1) automobiles, trucks, etc., for highway use, (2) computers and peripheral data processing equipment, and (3) all other.

The category "automobiles, trucks, etc., for highway use" is intended to measure expenditures for vehicles designed for highway use that were acquired through a purchase or lease-purchase agreement. Vehicles normally operating off public highways (vehicles specifically designed to transport materials, property, or equipment on mining, construction, logging, and petroleum development projects) are excluded from this item.

- 9. Foreign content of cost of materials—Establishments included in the ASM sample panel were requested to provide information on foreign-made materials purchased or transferred from foreign sources. This includes materials acquired from a central warehouse or other domestic establishment of the same company but made in an operation outside of the 50 States, District of Columbia, Puerto Rico, or U.S. territories.
- 10. Cost of purchased services—ASM establishments were requested to provide information on the cost of purchased services for the repair of buildings and other structures, the repair of machinery, and communication services. Included in the cost of purchased services for the repair of buildings and machinery are payments made for all maintenance and repair work on buildings and equipment, such as painting, roof repairs, replacing parts, and overhauling equipment. Such payments made to other establishments of the same company and for repair and maintenance of any leased property also are included. Extensive repairs or reconstruction that were capitalized are considered capital expenditures for used buildings and machinery and are, therefore, excluded from this item. Repair and maintenance costs provided by an owner as part of a rental contract or incurred directly by an establishment in using its own work force also are excluded.

Three basic approaches were utilized to produce these statistics.

1. For items 1 through 6, data were estimated (imputed) for all non-ASM establishments using the available data in the establishment record and industrybased parameters. The statistics were then generated by simply tabulating all census records including the imputed value for non-ASM establishments and the unweighted value for ASM establishments. Separate imputation rates were developed and are shown in the table. For quantity of purchased electricity for heat and power (item 7), a similar procedure was used; however, the imputation parameters were geographically-based instead of industrybased. For quantities of generated less sold electricity, no imputation was performed for non-ASM establishments. The estimates for these items are simply tabulations of unweighted ASM values.

Since the published statistics for these items were developed from the complete census universe and not just the ASM establishments, there are no sampling variances associated with these statistics. However, there is an unknown level of bias for each of the items due to the imputation of the non-ASM establishments. This bias is felt to be small due to the strong correlation between the items being imputed and the collected items that were used to generate the impute values.

2. For items 8 and 9, the estimates were developed using a ratio estimation methodology. For item 8, an estimate of the breakout of new capital expenditures for machinery and equipment into the three categories was made from ASM establishments reporting these categories. The estimated proportions were then applied to the corresponding Census value for new capital expenditures for machinery and equipment to produce the estimates.

The estimates for item 9, foreign content of cost of materials, were developed in a similar manner based on costs of parts, supplies, and components (item 5a) as the control total for the three categories.

For items 8 and 9, an adjustment ratio of the following form was computed.

$$Rj = \frac{NMc}{TMEasm}$$

where:

NMc = the census value of new capital expenditures for machinery and equipment

TMEasm = the weighted ASM value of new capital expenditures for machinery and equipment from reporters of the detailed breakout data

3. For item 10, cost of purchased services, the estimates were made by simply tabulating weighted data for all the ASM records that reported the item. A response coverage ratio (a measure of the extent to which respondents reported for each item) is shown in table 3c for the three types of services. It is derived for each item by calculating the ratio of the weighted employment (establishment data multiplied by sample weight, see appendix B) for those ASM establishments that reported the specific inquiry to the weighted total employment for all ASM establishments classified in the industry.

#### APPENDIX B.

# Annual Survey of Manufactures (ASM) Sampling and Estimating Methodologies

#### DESCRIPTION OF SURVEY SAMPLE

The Annual Survey of Manufactures (ASM) contains two components. The mail portion of the survey is a probability sample of about 56,000 manufacturing establishments selected from a total of about 220,000 establishments. These 220,000 establishments represent all manufacturing establishments of multiunit companies and all single establishment companies mailed schedules in the 1982 Census of Manufactures. This mail portion is supplemented annually by a Social Security Administration list of new manufacturing establishments opened after 1982 and a list of new multiunit manufacturing establishments identified from the Census Bureau's Company Organization Survey.

The 1984 through 1988 ASM sample differs slightly from the previous sample. For the current panel, all establishments of companies with 1982 shipments in manufacturing in excess of \$500 million were included in the survey panel with certainty. There are approximately 500 such companies collectively accounting for approximately 18,000 establishments. For the remaining portion of the mail survey, the establishment was defined as the sampling unit. For this portion, all establishments with 250 employees or more and establishments with a very large value of shipments also were included in the survey panel with certainty. A total of 12,100 establishments were selected from this portion of the universe with certainty. Therefore, of the 56,000 manufacturing establishments included in the ASM panel, approximately 31,000 are selected with certainty. These certainty establishments collectively account for approximately 80 percent of the total value of shipments in the 1982 census.

Smaller establishments in the remaining portion of the mail survey were sampled with probabilities ranging from 0.999 to 0.005 in accordance with mathematical theory for optimum allocation of a sample. The probabilities of selection assigned to the smaller establishments were proportional to measures of size determined for each establishment. The measures of size depend directly upon each establishment's 1982 product class values and the historic variability of the year-to-year shipments of each product class. Product classes displaying more volatile year-to-year change in shipments at the establishment level were sampled at a heavier rate.

This method of assigning measures of size was used in order to maximize the precision (that is, minimize the variance of estimates of the year-to-year change) in the value of product class shipments. Implicitly, it also gave weight differences in employment, value added, and other

general statistics, since these are highly correlated with value of shipments. Individual sample selection probabilities were obtained by multiplying each establishment's final measure of size by an overall sampling fraction coefficient calculated to yield a total expected sample size.

The sample selection procedure gave each establishment in the sampling frame an independent chance of selection. This method of independent selection permits the rotation of small establishments out of a given sample panel without introducing a bias into the survey estimates.

The nonmail portion of the survey includes all singleestablishment companies that were tabulated as administrative records in the 1982 Census of Manufactures. Although this portion contained approximately 130,000 establishments, it accounted for less than 2 percent of the estimate for total value of shipments at the total manufacturing level. This portion was not sampled; rather, the data for every establishment in this group were estimated based on selected information obtained annually from the administrative records of the Internal Revenue Service and the Social Security Administration. This administrative-record information, which includes payroll, total employment, industry classification, and physical location of the establishment, was obtained under conditions which safeguard the confidentiality of both tax and census records. Estimates of data other than payroll and employment for these small establishments were developed from industry averages.

The corresponding estimates for the mail and nonmail establishments were added together, along with the base-year differences, as defined in the Description of Estimating Procedure section, to produce the figures shown in this publication.

#### **DESCRIPTION OF ESTIMATING PROCEDURES**

Most of the ASM estimates for the years 1983-1986 were computed using a difference estimation procedure. For each item, a base-year difference was developed. This base-year difference is equal to the difference between the 1982 census published number for an item total and the linear ASM estimate of the total for 1982. The ASM linear estimate was obtained by multiplying each sample establishment's data by its sample weight (the reciprocal of its probability of selection) and summing the weighted values.

These base-year differences were then added to the corresponding current-year linear estimates, which include the sum of the estimates for the mail and nonmail establishments, to produce the estimates for the years 1983-1986. Estimates developed by this procedure usually are far more reliable than comparable linear estimates developed from the current sample data alone.

The 1987 sample estimates for the purchased service items, shown in table 3c, are strictly ASM linear estimates, however, developed only from ASM establishments that reported the specific item.

The remaining estimates in table 3c, showing the break-down of expenditures for new machinery and equipment and costs of parts (separated into purchases from foreign sources and purchases from domestic sources), were computed as ratio estimates. To do this, linear estimates of the new machinery detail items were developed from the ASM establishments and were ratio adjusted to the corresponding census total for new machinery. In a similar fashion, the ASM linear estimates of the detailed purchased materials items were ratio adjusted to the corresponding census total for cost of parts.

#### QUALIFICATIONS OF THE DATA

The estimates developed from the sample are apt to differ somewhat from the results of a survey covering all companies in the sampled lists but otherwise conducted under essentially the same conditions as the actual sample survey. The estimates of the magnitude of the sampling errors (the differences between the estimates obtained and the results theoretically obtained from a comparable, complete-coverage survey) are provided by the standard errors of the estimates.

The particular sample selected for the ASM is one of a large number of similar probability samples that, by chance, might have been selected under the same specifications. Each of the possible samples would yield somewhat different sets of results, and the standard errors are measures of the variation of all the possible sample estimates around the theoretical, comparable, complete-coverage values.

Estimates of the standard errors have been computed from the sample data for selected statistics in this report. They are presented in the form of relative standard errors (the standard errors divided by the estimated values to which they refer).

In conjunction with its associated estimate, the relative standard error may be used to define confidence intervals (ranges that would include the comparable, completecoverage value for specified percentages of all the possible samples).

The complete coverage value would be included in the range:

- From one standard error below to one standard error above the derived estimate for about twothirds of all possible samples.
- 2. From two standard errors below to two standard errors above the derived estimate for about 19 of 20 of all possible samples.
- From three standard errors below to three standard errors above the derived estimate for nearly all samples.

An inference that the comparable, complete-survey result would be within the indicated ranges would be correct in approximately the relative frequencies shown. Those proportions, therefore, may be interpreted as defining the confidence that the estimates from a particular sample would differ from complete-coverage results by as much as one, two, or three standard errors, respectively.

For example, suppose an estimated total is shown as 50,000 with an associated relative standard error of 2 percent, that is, a standard error of 1,000 (2 percent of 50,000). There is approximately 67 percent confidence that the interval 49,000 to 51,000 includes the complete-coverage total, about 95 percent confidence that the interval 48,000 to 52,000 includes the complete-coverage total and almost certain confidence that the interval 47,000 to 53,000 includes the complete coverage total.

In addition to the sample errors, the estimates are subject to various response and operational errors: errors of collection, reporting, coding, transcription, imputation for nonresponse, etc. These operational errors also would occur if a complete canvass were to be conducted under the same conditions as the survey. Explicit measures of their effects generally are not available. However, it is believed that most of the important operational errors were detected and corrected in the course of the Bureau's review of the data for reasonableness and consistency. The small operational errors usually remain. To some extent, they are compensating in the aggregated totals shown. When important operational errors were detected too late to correct the estimates, the data were suppressed or were specifically qualified in the tables.

As derived, the estimated standard errors included part of the effect of the operational errors. The total errors, which depend upon the joint effect of the sampling and operational errors, are usually of the order of size indicated by the standard error, or only moderately higher. However, for particular estimates, the total error may considerably exceed the standard errors shown.

The concept of complete coverage under the conditions prevailing for the ASM is not identical to the complete coverage of the census of manufactures, as the censuses have been conducted. Nearly all types of operational errors that affect the ASM also occur in the censuses. The ASM and the censuses, are conducted under quite different conditions, and operational errors can be better controlled in the ASM than in the censuses. As a result, for many of the census figures, the errors are of the same order of size as the total errors of the corresponding annual survey estimates. The differences between the census and ASM operating conditions also disturb, to some degree, the comparability of the ASM and census data.

Any figures shown in the tables in this publication having an associated standard error exceeding 15 percent may be of limited reliability. However, the figure may be combined with higher-level totals, creating a broader aggregate, which then may be of acceptable reliability.

# APPENDIX C. Changes in Census of Manufactures Product Classes for 1987

1987	1982	1987	1982	1987	1982	1987	1982
2011B	2011A 2013A pt	20866—Con.	20861 pt—Con. 20995 pt	2221F—Con.	22211 pt—Con. 22212 pt 22213 pt	23259—Con.	23279—Con. 23289 pt
0135	20130	20910	20324 pt		22214 pt 22215 pt	23260	23280
013B	2013A pt		20910	_	22216 pt 22217 pt	23261	23281
0150	20160 20170	20925 20926	20924	2221G	22211 pt	23262	23284
0151	20161	20961 20962	20992		22212 pt 22213 pt	23269	23289 pt
0151	20171	20963			22214 pt 22215 pt	23293	23271 pt
0152	20162 20172	20980	20981 pt		22216 pt 22217 pt	20500	23292
0153	20163	20997	20341 pt 20440 pt	2221H	22211 pt 22212 pt 22213 pt	23530	23510 pt 23520
	20173		20982 2099A pt		22214 pt	23531	23521
0154	20164 20174	20999	2099B pt		22215 pt 22216 pt	23532	23522
)155	20165	2099D	20995 pt		22217 pt	23533	23510 pt
	20175	2099E	2099C	2221J	22218	23692	23631
)159	20179	2099F 2099G	20981 pt	2221K	22219	23693	23691
0226	20220	2211B	22111 pt	2221M	2221A	23699	23619
239	20239 2099A pt		22112 pt 22113 pt	22510	22510 pt		23699
267	20266 pt		22114 pt 22115 pt 22116 pt	22514	22512 pt	23813	23811 pt 23812 pt
	2099B pt	2211C	22110 pt	22518	22517 pt	23814	23811 pt 23812 pt
268	20266 pt 2099B pt		22112 pt 22113 pt	22520	22510 pt 22520	23952	23951 pt
324	20324 pt		22114 pt 22115 pt 22116 pt	22525	22512 pt	23958	23959
)343	20341 pt	2211D	22111 pt		22523	23964	23951 pt
380	20380 pt		22112 pt 22113 pt	22526	22517 pt 22524	24930	
0384	20381 pt 20383 pt		22114 pt 22115 pt	22585	22920 pt	24930	24920 pt 26610
)415	20383 pt	20115	22116 pt	22589	22589 22920 pt	24931	24920 pt
	20415	2211E	22111 pt 22112 pt 22113 pt	22730	22710 pt	24932	24920 pt
1440	20440 pt		22114 pt 22115 pt	22700	22720 pt 22790 pt	24933	24993
450	20383 pt 20450		22116 pt	22731	22710 pt	24934	24996
1470	20470 pt	2211F	22117	22732	22720 pt	24935	26611
0480	20470 pt	2211G	22119	22733	22790 pt	24936	24998
	20480	2211H	2211A		ш. оо р	24937	24995
048A	20475 20476	2221B	22211 pt 22212 pt	22815	22833	24994	2499A pt
0530	20380 pt 20381 pt		22213 pt 22214 pt 22215 pt	22822	22822 22830	25115	25115 25158
640	20650 pt		22216 pt 22217 pt	22991	22910	25145	25141 25142
0642	20652	2221C	22211 pt 22212 pt	22994	22940	25146	25142
0643	20653		22213 pt 22214 pt	22995	22930		25143
0649	20659		22215 pt 22216 pt	22996	22992 22993	25147	
660	20660	2221D	22217 pt 22211 pt	23219	23219 pt	25425 25991 25992	25990
660	20990 pt		22212 pt 22213 pt	23221	23220	25994	000:0
0669	20668 20998		22214 pt 22215 pt	23222	23215	2621B	26612
0680	20341 pt		22216 pt 22217 pt	23229	23219 pt	26560	26540
	20650 pt 20657	2221E	22211 pt		23219 pt 23229	26561	26541
0863 0864	20861 pt		22211 pt 22212 pt 22213 pt 22214 pt 22215 pt	23250	23270	26562	26542
0865			22214 pt 22215 pt 22216 pt	23251	23271 pt	26563	26545
0866	20861 ot		22217 pt	23252	23283	26570	26510 26544
	20861 pt 20862	2221F	22211 pt	23259	23279		

[Based on revisions to the Standard Industrial Classification (SIC) Manual definitions of some product classes were revised for 1987. Listed below are the revisions to the product classes]

1987	1982	1987	1982	1987	1982	1987	1982
26710	26410 pt	26753	26455	27591	27511 pt	28350—Con. 28351	2831A-Con.
26711	26415	26760	26470	27592	27512 pt	28351	
26712	26416	26761	26471	27593	27513 pt	28360	28310
26713	26419	26763	26473	27594	27514 pt	28361	28311
26714	2641A	26764	26474	27595	27515 pt	28362	28312
26720	26410 pt	26770	26420	27596	27516 pt	28363	28317
26721	26410 pt 26411	26780	26480	27597	27511 pt 27512 pt 27513 pt	28364	28318 28319
		26781	26481		27514 pt 27515 pt	28656	2911C
26722	26413	26782	26482		27516 pt	28691	2911B
26723	26414	26790	26460 pt	27598	27519	28916	28915
26724	2641B		26490	27599	27531	28917	20915
26730	26430 pt	26791	26493	2759A	27510 pt	2911D	2911D pt
26731	26435	26792	26494	27960	27530	29990	2911D pt 29990
26732	26436	26793	26496		27950		
26733	26437	26794	26460 pt	27961	27951 35557 pt	31430	31430 31433
26740	26430 pt	26795	26497	27962	27952		31434 31435
26741	26434	27416 27417	27411	27963	27532	31440	31440 31445
26742	26438	27418	27412		27547 27930 27940		31446 31447 31448
26750	26450	27419	27414	28247	28243	31490	31448
26751	26453	2741A	27415		28245	31430	31491 31493
26752	26454	2741B 27590	27510 pt	28248	28246 2831A		31495 31496 31497

# APPENDIX D. Changes in Census of Manufactures Product Codes for 1987

	r 1987]										
1987 published	1987 collected	1982 published	1987 published	1987 collected	1982 published	1987 published	1987 collected	1982 published	1987 published	1987 collected	1982 published
20119 14	20119 14	20119 12 20119 13	20159 17	20179 17	20179 17	20343 21	20341 21	20341 21	20488 21	20488 21	20488 18
2011B 15	2011B 15	2011A 15	20159 51	20179 51	20179 51	20343 23	20341 23	20341 23	20488 23	20488 23	20488 17 pt
2011B 41	2011B 41	2011A 41	20159 53	20179 53	20179 53	20343 29	20341 29	20341 29	20488 25	20488 25	20488 19 pt
2011B 55	2011B 55	2011A 55	20159 55	20179 55	20179 55	20343 31	20341 31	20341 32 20341 33	20488 31	20488 31	20488 17 pt
2011B 99	2011B 99	2011A 31	20159 57	20179 57	20179 57	20050.04	00050.04	20341 35	20488 33	20488 33	20488 19 pt
00105 10	00105 12	2011A 51 20130 00	20226 00	20220 11	20220 00	20352 31 20352 34	20352 31 20352 34	20352 33	2048A 01	20475 35	20475 35
20135 13 20135 17	20135 13 20135 17	20130 00	20235 22	20235 22	20235 28 pt	20354 35	20354 35	20354 31 20354 33	2048A 03	20475 52	20475 52
20151 33	20161 33	20161 33	20235 29	20235 29	20235 21 20235 28 pt			20354 39	2048A 05	20476 61	20476 61
20151 34	20161 34	20161 34	20239 23	20239 23	20239 29 pt	20382 26 20382 28	20382 26 20382 28	20382 27	2048A 07	20476 63	20476 63
20151 36	20161 36	20161 36	20239 25	2099A 12	2099A 11 pt	20384 51	20383 51	20383 51	2048A 09	20476 65	20476 65
20151 39	20161 39 20171 39	20161 39 20171 39	20239 28	20239 28	20239 29 pt	20384 59	20383 59	20383 59	2048A 11	20476 67	20476 67
20151 41	20161 41	20161 41	20239 32	20239 32	20239 31	20384 63	20383 63	20381 18	2048A 13	20476 69	20476 69
	20171 41	20171 41	20239 38	20239 38	20239 37	20384 69	20383 69	20383 61 pt	20512 39 20512 40 20512 42	20512 39 20512 40 20512 42	20512 38
20152 21	20162 21 20172 21	20162 21 20172 21	20240 31	20240 31	20239 39 20240 98 pt	20411 26	20411 26	20411 24 20411 25	20530 11	20381 11	20381 11
20152 23	20162 23 20172 23	20162 23 20172 23	20240 51	20240 52	20240 98 pt	20412 19	20412 19	20412 00	20530 13	20381 13	20381 13
20153 22	20163 22	20163 21 pt	20240 54	20240 54	<del></del>	00445.04	00000.05	20412 17	20530 14	20381 14	20381 14
20152.04	20173 22	20173 21 pt	20240 99	20240 99	20240 98 pt	20415 91 20415 93	20383 65 20383 66	20383 61	20530 17	20381 17	20381 17
20153 24	20163 24 20173 24	20163 23 pt 20173 23 pt	20267 11	2099B 11	2099B 11	20430 21 20430 23	20430 21 20430 23	20430 19	20530 19	20381 19	20381 19
20153 26	20163 26 20173 26	20163 25 pt 20173 25 pt	20267 13	2099B 13	2099B 13	20430 55	20430 55	20430 52 pt	20642 00	20652 00	20652 00
20153 27	20163 27	20163 21 pt	20267 14 20267 16	2099B 14 2099B 16	2099B 19 pt	20430 57	20430 57	20430 53 pt	20643 00	20653 00	20653 00
	00470 07	20163 23 pt 20163 25 pt	20267 17	20267 17	20266 17	20430 61	20430 61	20430 59 pt	20649 21	20659 21	20659 21
	20173 27	20173 21 pt 20173 23 pt 20173 25 pt	20267 18	2099B 18	2099B 19 pt	20430 63	20430 63	20430 52 pt	20649 76	20659 76	20659 76
20154 14	20164 14	20164 14	20268 13	2099B 51	2099B 51			20430 53 pt 20430 59 pt	20669 11	20668 11 20998 11	20668 11 20998 11
	20174 14	20174 14	20268 15	20268 15	20266 15	20450 91 20450 93	20383 67 20383 68	20383 61	20669 21	20668 21	20668 21
20154 16	20164 16 20174 16	20164 16 20174 16	20268 19	20268 19	20266 19	20464 72	20464 72	20464 69		20998 21	20998 21
20155 11	20165 11 20175 11	20165 11 20175 11	20324 97 20324 99	20324 97 20324 99	20324 98	20464 75	20464 70		20669 63	20668 63 20998 63	20668 63 20998 63
20155 13	20165 13	20165 13	20331 13	20331 13	20331 71	20481 21	20481 21	20481 13 pt	20669 71	20668 71 20998 71	20669 71 20998 71
	20175 13	20175 13	20331 32	20331 32	20331 72	20481 22	20481 22	20481 17 pt	20669 75	20668 75	20668 75
20155 15	20165 15 20175 15	20165 15 20175 15	20331 36	20331 36	20331 73	20481 23	20481 23	20481 26 pt		20998 75	20998 75
20155 31	20165 31	20165 31	20331 38	20331 38	20331 74	20481 24	20481 24	20481 28 pt	20669 81	20668 81	20668 81
20455 00	20175 31	20175 31	20331 41	20331 41	20331 75	20481 31	20481 31	20481 13 pt	20669 92	20668 92 20998 92	20668 92 20998 92
20155 32	20165 32 20175 32	20165 32 20175 32	20332 05	20332 05	20332 08 20332 09	20481 32	20481 32	20481 17 pt	20669 93	20668 93 20998 93	20668 93 20998 93
20155 33	20165 33 20175 33	20165 33 20175 33			20332 92	20481 33	20481 33	20481 26 pt 20481 28 pt	20669 95	20668 95	20668 95
20155 34	20165 34	20165 34	20332 37	20332 37	20332 96	20483 01	20483 01	20483 00		20998 95	20998 95
	20175 34	20175 34	20336 14	20336 14	20336 13	20483 02	20483 02	20400 00	20670 11 20670 14	20670 11 20670 14	20670 12
20155 39	20165 39 20175 39	20165 39 20175 39	20336 15 20336 31	20336 15 20336 31	20336 19	20485 03 20485 04	20485 03 20485 04	20485 00	20680 13	20657 13	20657 13
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1987 published	1987 collected	1982 published	1987 published	1987 collected	1982 published	1987 published	1987 collected	1982 published	1987 published	1987 collected	1982 published
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		20861 39 pt 20861 42 pt	20866 06	20866 06	20861 83 pt	20997 81	20982 35	20982 35	2211H 43	2211H 43	2211H 43
		20861 44 pt 20861 45 pt	20866 07	20995 85	20995 85	20997 85	20982 41	20982 41	2211H 44	2211H 44	2211A 44
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		20863 13 20863 14	20873 23	20873 23	20873 13 F <sup>+</sup> 20873 39 pt	20999 35	2099B 35	2099B 98 pt	2211H 67	2211H 67	2211A 67
		20863 15 20863 16 20863 17	20873 25	20873 25	20873 13 pt	20999 41	2099B 41	2099B 41	2211H 69	2211H 69	2211A 69
		20863 18	20873 41	20873 41	20873 39 pt 20873 13 pt 20873 39 pt	20999 53 20999 55 20999 98	2099B 53 2099B 55 2099B 99	2099B 98	2211H 73 2211H 75 2221B 00	2211H 73 2211H 75 2221B 00	2211A 75  22211 00 pt
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report forms to	or 1987]										
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### **PUBLICATION PROGRAM**

#### 1987 CENSUS OF MANUFACTURES

Publications of the 1987 Census of Manufactures, containing preliminary and final data on manufacturing establishments in the United States, are described below. Publications order forms for the specific reports may be obtained from any Department of Commerce district office or from Data User Services Division, Customer Services (Publications), Bureau of the Census, Washington, DC 20233.

#### **Preliminary Reports**

#### Industry series—83 reports (MC87-I-20A(P) to -39D(P))

Preliminary industry data are issued in 83 separate reports covering 459 industries. Preliminary summary data for the U.S. and States are released in one report.

#### Final Reports

#### Industry series—83 reports (MC87-1-20A to -39D)

Each of the 83 reports provides information for a group of related industries ("dairy products" includes industries for butter, cheese, milk, etc.). Final figures for the United States are shown for each of the 459 manufacturing industries on quantity and value of products shipped and materials consumed, cost of fuels and electric energy, capital expenditures, assets, rents, inventories, employment, payroll, payroll supplements, hours worked, value added by manufacture, number of establishments, and number of companies. Comparative statistics for earlier years are provided where available.

For each industry, data on value of shipments, value added buy manufacture, capital expenditures, employment, and payroll are shown by employment-size class of establishment, State, and degree of primary product specialization.

#### Geographic area series—51 reports (MC87-A-1 to -51)

A separate report is being published for each State and the District of Columbia. Each report presents data for industry groups and industries on value of shipments, cost of materials, value added by manufacture, employment, payroll, hours worked, new capital expenditures, and number of manufacturing establishments for the State, MSA's, counties, and selected places. Comparative statistics for earlier census years are shown for the State and large MSA's. Manufacturing totals are presented for each county and for places with significant manufacturing activity. Detailed statistics (including inventories, assets, rents, and energy costs) are presented only in statewide totals.

#### Subject series—7 reports (MC87-S-1 to -7)

Each of the seven reports contains detailed statistics for an individual subject, such as concentration ratios in manufacturing, type of organization, water use in manufacturing, textile machinery in place, distribution of sales by class of customer, manufacturers' shipments to the Federal Government, and a general national-level summary.

#### Reference series—1 report (MC87-R-1)

The Numerical List of Manufactured and Mineral Products includes a description of the principal products and services published in the 1987 Censuses of Manufactures and Mineral Industries.

## Location of Manufacturing Plants—1 report (MC87-LM)

This report includes data for number of establishments by four-digit SIC industry and by employment-size class for counties, incorporated places of 2,500 inhabitants or more, and zip codes for each State. (This report is available only on magnetic tape and CD-ROM.)

#### Analytical Reports—3 reports (AR87-1 to -3)

#### **Exports From Manufacturing Establishments (AR87-1)**

This report presents data on exports by two- and three-digit SIC industry groups for the United States and States. Information is presented on value of direct report shipments and estimates of the employment required to manufacture these products. Included are estimates of employment in manufacturing and nonmanufacturing establishments that supply parts, materials, and services for production of manufactured exports.

## Selected Characteristics of Manufacturing Establishments That Export (AR87-2)

This report presents data on the number of manufacturing companies and establishments that export by major group, State, employment size, and ratios of exports to shipments.

#### **Indexes of Production (AR87-3)**

The indexes presented in this report are designed to measure the change in physical output of each manufacturing and mineral industry between 1982 and 1987.

#### MICROFICHE

Every final published report in the 1987 Census of Manufactures will be available on microfiche.

## PUBLIC-USE COMPUTER TAPES AND COMPACT DISCS

Data from the final industry series, geographic area series, and the Location of Manufacturing Plants report will be available on public-use computer tapes and compact discs-read only memory (CD-ROM). These tapes will provide the same information found in the final reports. Computerized data products are available for users who wish to summarize, rearrange, or process large amounts of data. These products, with corresponding technical documentation, are sold by Data User Services Division, Customer Services (Tapes), Bureau of the Census, Washington, DC 20233.

#### OTHER ECONOMIC CENSUSES REPORTS

Data on retail trade, wholesale trade, service industries, construction industries, mineral industries, transportation, enterprise statistics, minority-owned businesses, and women-owned businesses also are available from the 1987 Economic Censuses. A separate series of reports covers the censuses of outlying areas—Puerto Rico, Virgin Islands of the United States, Guam, and the Northern Mariana Islands. Separate announcements describing these reports are available free of charge from Data User Services Division, Customer Services (Publications), Bureau of the Census, Washington, DC 20233.









